

**An Episode of Flatland or How a Plane Folk Discovered the  
Third Dimension With Which is Bound Up an Outline of the  
History of Unæa**

By Charles Howard Hinton

London: Swan Sonnenschein & Co., Limd., 25, High Street,  
Bloomsbury.

1907

## PREFACE

An objection is often made to the very word Flatland, and the term plane being – as if the existence of such a region and so circumstanced a people were impossible. All such doubts find a ready solution in the Introduction to this narrative, in which is given a profound analysis of the structure of the people, the physical geography of the region, and a historical sketch of earlier events.

In dealing with the Episode which forms the subject of the story however, a different plan has been taken, a different method pursued.

The attempt has been made to let the physical differences and the extreme limitations of the people fall into the background, so that with the kind of perception which recognises a nature akin to his own, the reader may pass to a comprehension of the situation through the feelings, acts, ideas and struggles of the actors themselves.

It is enough for the reader to remember, that at the time the narrative opens the inhabitants of Astria – these flatlanders, these Unæns – had arrived at a state of civilization which, though mechanically inferior to ours, yet in respect to the organization of the State, the

conduct of business, the unequal distribution of wealth, and the charm of society, was not so very much unlike our own condition.

# Contents

Introduction

The History of Astria

The Episode

Chapter 1: A Glimpse at Unæn Society

Chapter 2: The Statesman

Chapter 3: Father and Daughter

Chapter 4: A Dinner Party

Chapter 5: The Fete of Flowers

Chapter 6: On Lone Mountain

Chapter 7: Laura's Letter

Chapter 8: The Orbian

Chapter 9: Laura Takes a Hand

Chapter 10: The Conference

Chapter 11: Cartwright Conspires

Chapter 12: The Assault

Chapter 13: The Siege

Chapter 14: The New Order

Chapter 15: An Afternoon Call

Chapter 16: An Accidental Meeting

Chapter 17: The Journey

Chapter 18: The Editor

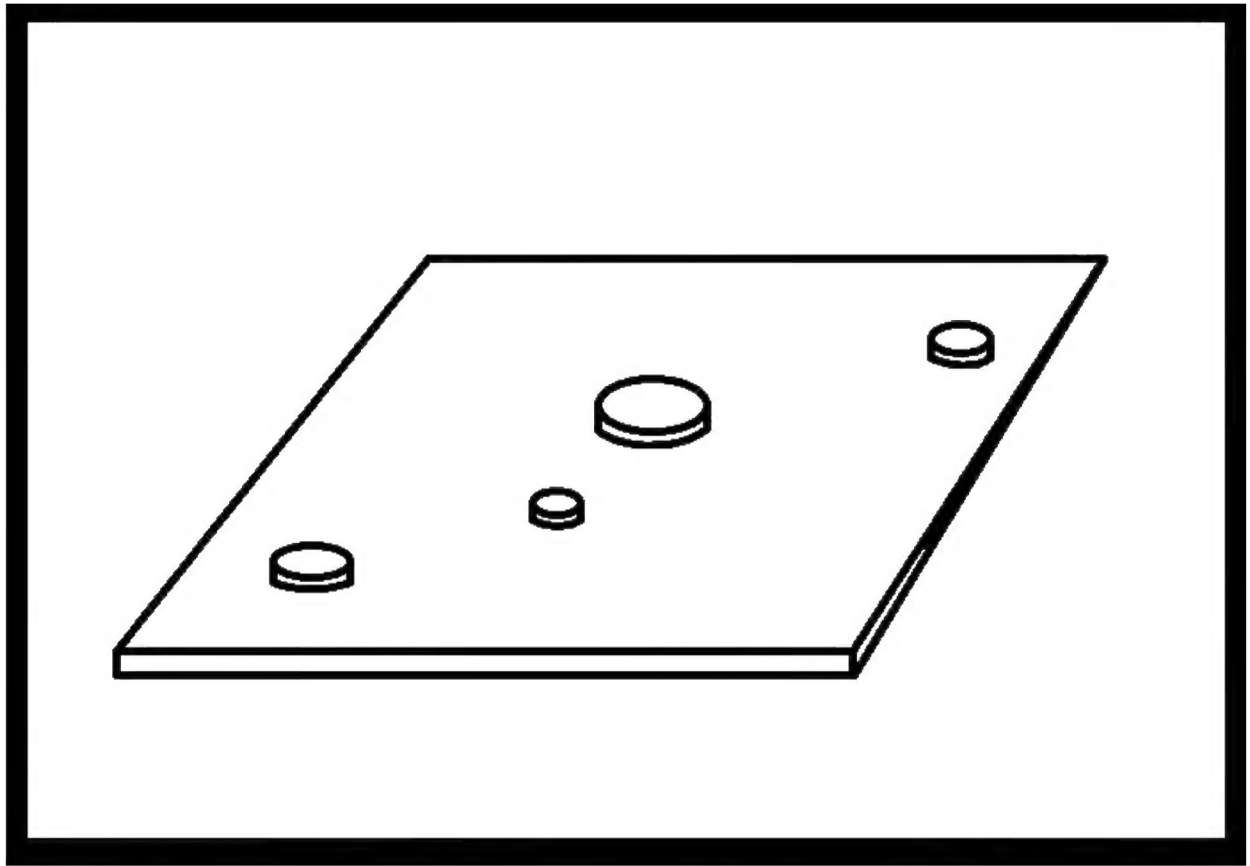


Chapter 19: On Lone Mountain Again

Chapter 20: Apology

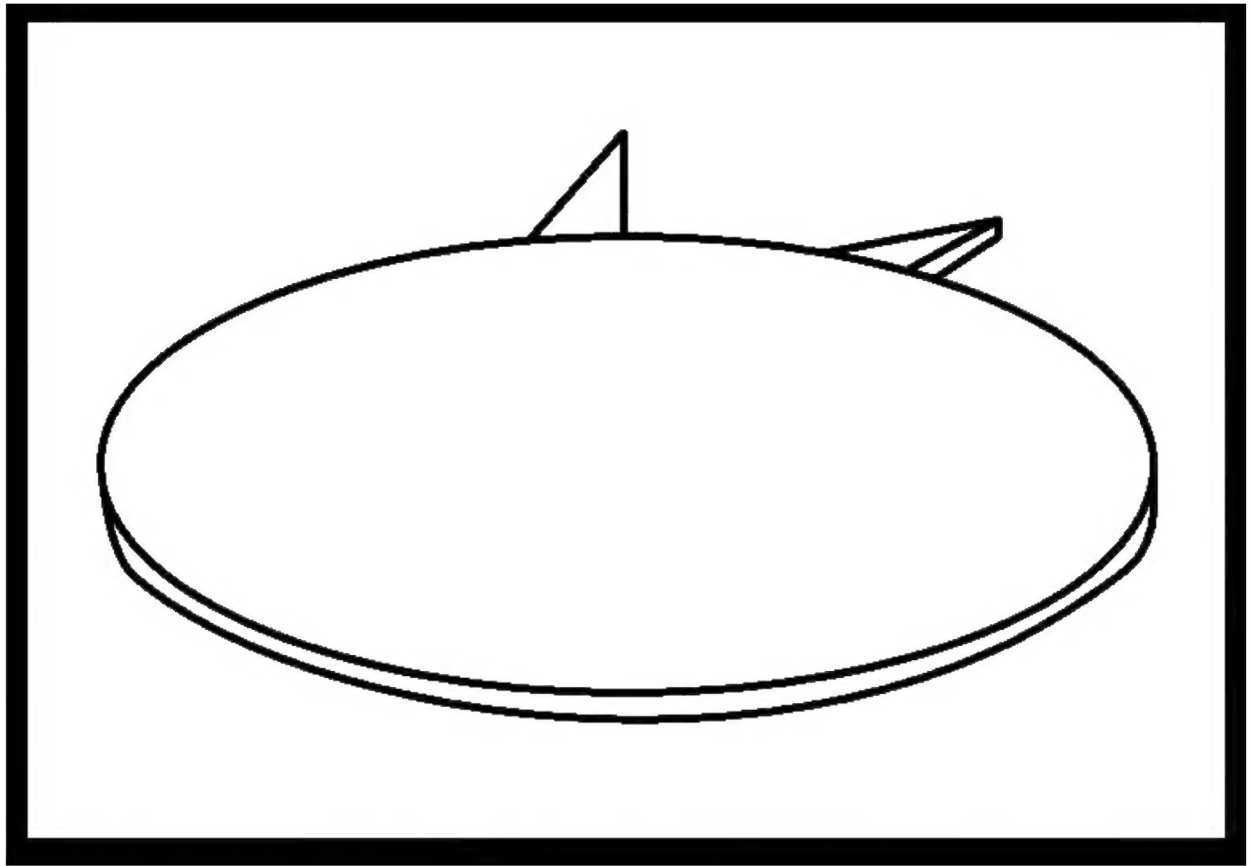
## INTRODUCTION

Placing some coins on the table one day, I amused myself by pushing them about, and it struck me that one might represent a planetary system of a certain sort by their means. This large one in the centre represents the sun, and the others its planets journeying round it.



[ID: A simple black and white drawing of round coins sitting on a flat surface, with a large coin in the center and three smaller ones around it at various distances. End ID.]

And in this case considering the planets as inhabited worlds, confined in all their movements round their sun, to a slipping over the surface of the table, I saw that we must think of the beings that inhabit these worlds as standing out from the rims of them, not walking over the flat surface of them. Just as attraction in the case of our earth acts towards the centre, and the centre is inaccessible by reason of the solidity on which we stand, so the inhabitants of my coin worlds would have an attraction proceeding out in every direction along the surface of the table from the centre of the coin, and "up" would be to them out from the centre beyond the rim, while "down" would be towards the centre inwards from the rim. And beings thus situated would be rightly described as standing on the rim.



[ID: A large disk lying on its side, with two right triangles sitting on the rim on the far side from the camera. End ID.]

And I saw that if I supposed the surface of the table to be perfectly smooth, so that there was no impediment to motion along it, then these beings would have no notion at all that there was a surface on which they slipped. Since the surface is always in contact with every moving thing, the notion of it would be absent from their consciousness. There would be no difference in respect to it. And I saw that here I had an image of a two dimensional world, a world in which the creatures of it would think that space itself was two dimensional.

We see that the discs which form these worlds must be supported somehow, but the beings of such a universe would not ask such a question-they would think that all the space there was lay in the extension of the movements they made, and would never think of any movement away from or into the table, being always in contact with it.

But it is very hard to realise how "out" from a disc, such as one of my coins, could be felt as "up" and inward towards the centre of it would be felt as "down." To ease my mind on this point I imagined myself standing on the equator of our earth, looking along it, and then a great steel blade coming down and cutting the earth right through along the equator circle, and then coming down again and

cutting a slice parallel to the first. And then I imagined this slice of the earth and myself sticking against the steel blade, like the slice of a pea against a knife blade. In this way I gained the feeling of a being on a disc, with an "up and down," "away from and to" the centre of the disc.

But still I had a consciousness of another direction than those of "forward and backward" – along the rim of the disc – and "up and down" away from its centre and towards it. I could not help predicating myself with the sense of right and left-away from and into the steel blade. To lose this sense I must evidently change my notion of the constitution of my body. Without carrying the cutting so far as to imagine myself sliced, I imagined myself as made of very thin material, just of the width of the slice of the earth, and supposed that I myself and all the matter of the slice were of the same thickness, and stood out from the blade to exactly the same amount.

"If now," I said, "I was unconscious of this thickness, if the blade was perfectly smooth, and I and all the matter I knew slipped perfectly freely over it, I should have a two dimensional experience. My arm in moving, or my finger in pointing, could only move in contact with the blade, and I could never point in a third dimension. I

should not think of it, for all motions of all things take place along the surface of the blade."

Thus it became apparent that without making the supposition that I was a mere line or triangle, or other geometrical figure, I could imagine myself as a two dimensional being. If my thickness were very small and I was unconscious of it, if I could never move away from contact with a surface, my experience would be that of a two dimensional being. So, after all, it seemed possible that there could be real two dimensional beings. Now, if a thing is real, the only reason for not seeing it is either that it is small, or very far away – or some other reason. Hence I began to set about to try to discover these two dimensional beings, and learn all about them. I succeeded at last, and if I do not tell you how, I am afraid it is from no very worthy motive. For if I told how one could find out about them, I am afraid Mr. Wells or Mr. Gelett Burgess or some other brilliant author would begin to write about them, and to serve them up with all the resources of wit and humour. In that case no one would listen to me. As it is I intend to have the pleasure of telling about them myself.

One thing always puzzled me from the beginning of the time when I began to think about these plane beings, and that is about their eyes.



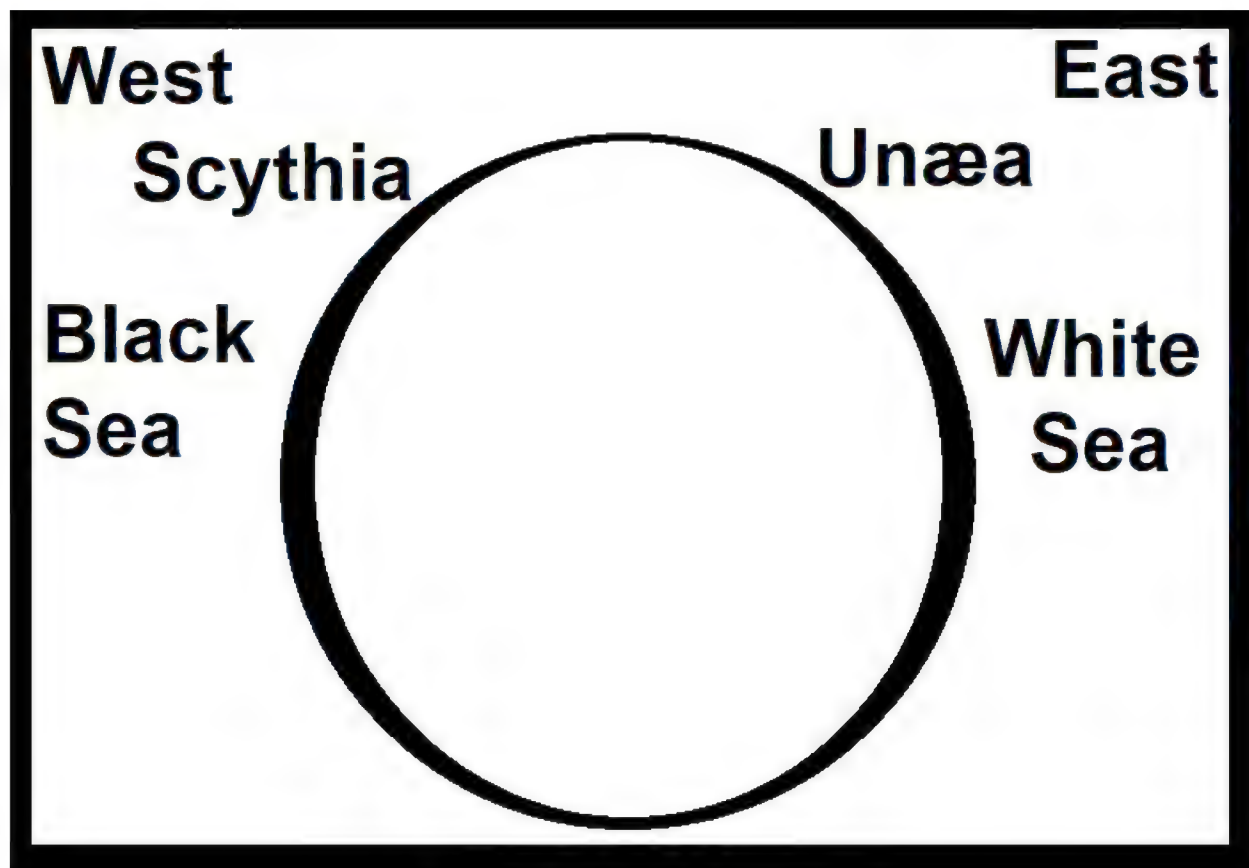
It is clear that they could not have two eyes beside one another as we have, for there is not the thickness in their bodies to place them so. Now, if they had two eyes, I wondered if one was above the other, or if they had one eye in front, another in the back of their heads. About this and other questions, I gained subsequently all the information one can desire. I have come to think of these creatures, from what I have found out, as very like ourselves, in different physical conditions it is true-but motives, aims and character, vary but little, however conditions differ. The only broad characteristic of difference I would draw is that they are not so massive as we. They are more easily moved to action, and political and other changes are brought to pass more easily than with us. They also take narrower views than we do, they do not look on things in the broad and tolerant way we do.

In order to place before the reader all that I have to say systematically, I will begin with a short history of Astria, summarising the events which took place on that planet from the earliest times till I come to the epoch about which I have written in mere detail. With regard to that period, by selecting from the materials at my disposal, I have given some definite and personal information about characters who played an important part in late events.

## **The History of Astria**

Astria is a plane world, along the rim of which its inhabitants walk. "Up" is away from the centre of the disc, "down" is towards the centre. To save myself the trouble of going into anatomical details, I will represent an Astrian, diagrammatically, by means of a triangle. And it will be conducive to the clearness of the reader's imagination, if he will suppose the great sheet of matter against the surface of which Astria, its sun, and all the material bodies of that universe slip, to be disposed vertically. He will then gain a more real presentment of the feelings of motion and progression in this world.

The edge of the plane world of Astria is divided into two approximately equal portions by two oceans – the Black Sea and the White Sea. Since the daily motion of rotation of Astria takes place in the direction denoted by an arrow, the sun appears to rise over the White Sea, and the direction from the inhabited region to the White Sea is called "East."

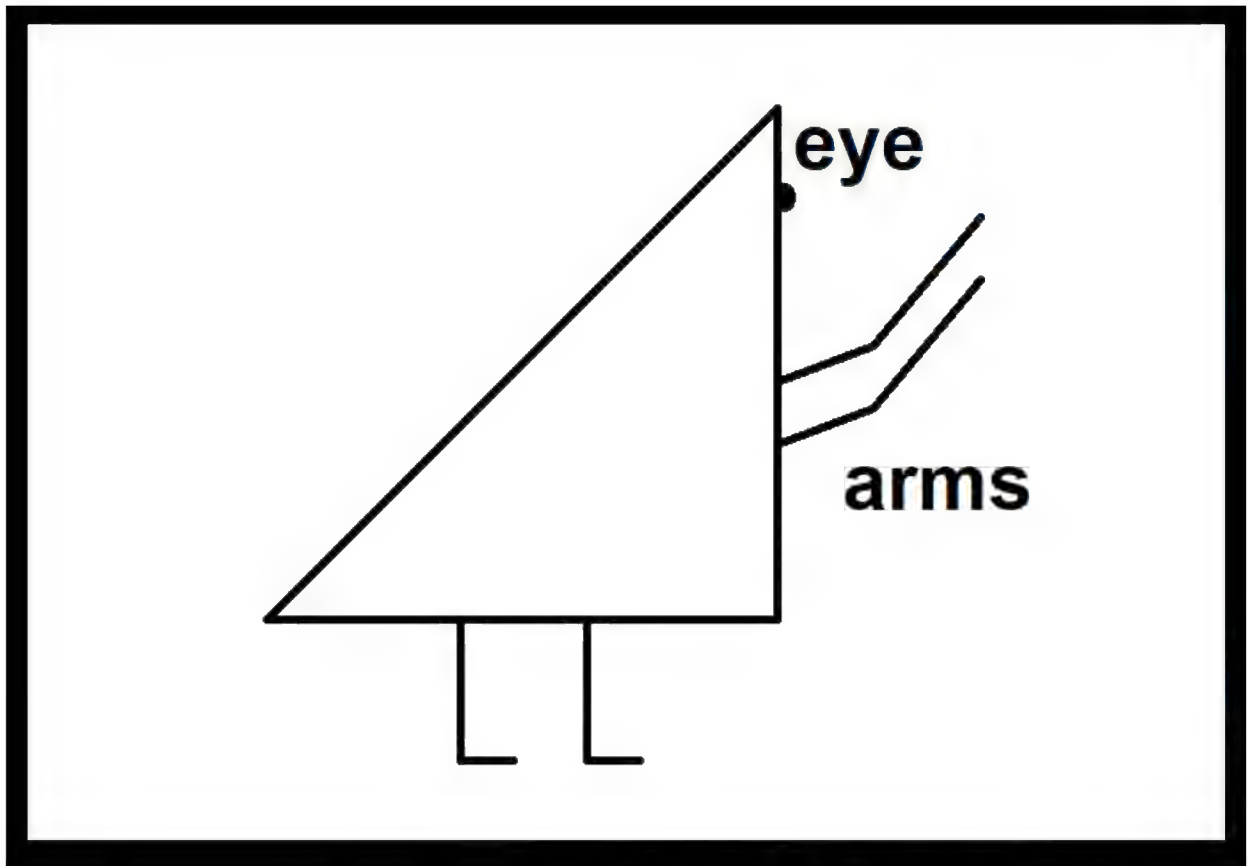


[ID: An uneven black circle with the left and right sides thicker than the north and south. The left side is labeled, “West, Scythia, Black Sea. The right side is labeled, “East, Unæa, White Sea”. End ID.]

In the earliest times the inhabited region was divided amongst two peoples, the Unæns and the Scythians. Of these the Unæns were by far the more civilized. In fact, all that gave Astria the promise of becoming the gem of her planetary system, was to be found amongst the Unæns, while the Scythians led a predatory nomadic existence. Yet, versed as they were in all the arts of life, the Unæns, from the dawn of history, were gradually forced back and conquered by the Scythians.

Caesar in his history of the wars in Gaul, speaking of the provincials, says that it was their culture that made them fall before the barbaric and hardy valour of the Germans. He speaks as if civilization and culture brought of itself something debilitating and weakening to the sterner virtues. But a different reason must be assigned for the constant defeats of the Unæns, the constant ravishment of their territory, the continual absorption of a region of light into darkness by the Scythian hordes, who spared neither age nor sex, and never relinquished the land they once had gained.

I will explain the cause of the Unæns' ill success. My rough and ready representation of the inhabitants of Astria, by means of a triangle, is sufficient to enable me to describe the main features of their bodily configuration.



[ID: A simple digital drawing of a right triangle with its vertical flat side facing to the right, or the East. On that side he has two thin lines for arms, one above the other, and a single round black eye. He has two legs with feet forming L shapes, both facing the East. End ID.]]

This figure of a triangle I use in a conventional way as a mark or symbol, which is simple and easy to draw, and which without any unnecessary complication enables me to make matters plain. It shows a thing I have often wondered at, namely, that there is a certain indication in the Astrian frame of being fashioned after the pattern of a higher existence rather than of complete adaptation to the exigencies of its narrow world.

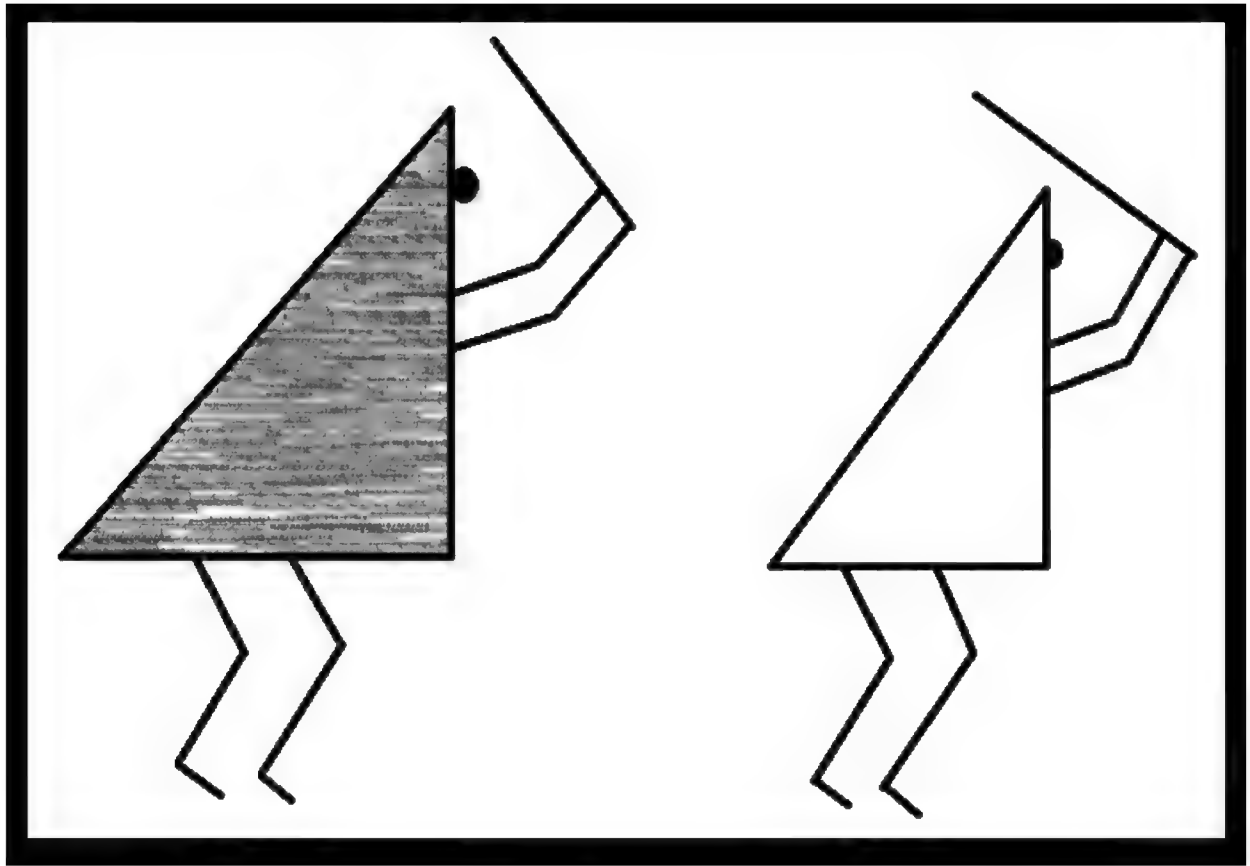
Looking at the triangle which represents an Astrian, we see that on one edge are two arms and an eye, while on the other edge there exist no organs of sense or prehension. Thus, in going to the East, an Astrian could see his way clearly, and in working on anything, if it was placed to the East of him, he could operate on it conveniently; objects to the West, however, could only be seen by his bending over, and assuming a posture which, despite the suppleness of his frame, it was difficult to assume and painful to maintain for any length of time. Objects to the West also could only be reached at in a very awkward and ineffective manner.

It seems to us as if it would be an easy thing for an Astrian to turn round so that he could face in the West direction. But to do this we would have to lift the thin body of the man away from the sheet against which it slips. Such an operation is, of course, inconceivable

to the inhabitants of a plane world, and their bodies would not stand such an operation, for they are far too thin to be safely turned about and even temporarily deprived of the support of the sheet on which they slip. Every man in Astria was born facing the East, and facing the East he continued till he died.

Now I believe it is evident why the Scythians evidenced such a superiority over the Unæns in warfare. The constitution of the Astrian body was such, that a Scythian man had an advantage over a Unæn man of a kind that no skill or discipline could countervail.

The Scythian whom I represent as a shaded figure, could both see the Unæn plainly and deliver blows at him to good effect, while the Unæn whom I represent as an unshaded figure, could only see the Scythian by a difficult exertion, and could only attack him or strike at him indirectly and backwards.



[ID: Two of the right triangle figures seen earlier, now both with a line held over their head as a weapon. Both face to the East, the one on the left side of the image is shaded in black, attacking the white one in front of him. End ID.]



Thus year after year the Unæns were forced within ever narrowing boundaries, till at last, with the White Sea on one side, their irresistible foes on the other, there seemed no outcome other than final and absolute extinction.

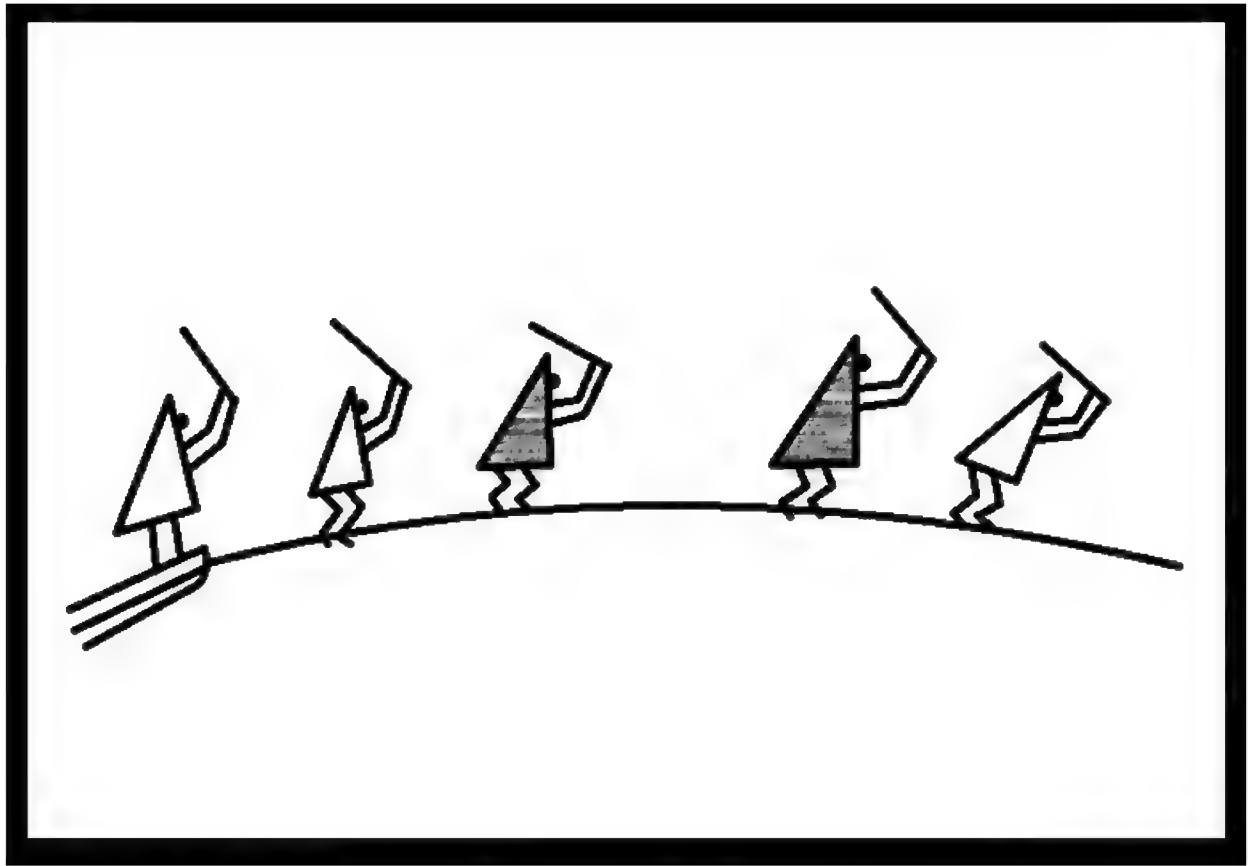
Yet with this hopeless prospect there was no demoralization of the national character: literature and art turned to motives of a more serious nature than in times when the danger was less closely realised, and the greatest minds devoted themselves to the inculcation of a brave and stoical courage, and a religion which robbed death of its terrors.

It is easy to say in the light of after events, that the intellectual energy of the race would have been better employed in the exploration of nature, and the wresting from its secrets of more efficacious methods of warfare. But the obvious is always found by an unobvious path. Unæn history affords no exception to the rule, as the following account of their discovery how to oppose the Scythians will show.

Amongst the men of this slowly perishing race were found some who withdrew their minds from all the fears of their time, and, with a detached and impersonal interest, studied the movements of the distant stars. Thus with the Unæns, as with us, in Astronomy,

Science was born. Science, that interest, that appreciation of things in and for their own sake which we are accustomed to think of as the product of a prosperous and leisured community, sprang up in Unæn, when the bulwarks of their national existence were crumbling before the savage insistent blows of their inveterate enemy.

And as with us, Science in Astronomy gave its first gift to man, giving us the art of navigation, so in Unæn Science through Astronomy gave its first gift to these mortals. But the gift did not consist merely in the facilitation of an art. It was of unparalleled splendour, nothing less than the salvation of their race. For, studying the mutations of the heavenly bodies, accounting for their vicissitudes, eclipses and disturbances, astronomers came to the great thought of the roundness of their earth. And as the news spread, as the tidings passed from one to the other that their earth was assuredly round, without any other words a great joy filled the hearts of this intelligent people. For everyone recognised without comment, that if their world was round, then a Unæn circumvading their disc would be in a position of as great advantage over a Scythian as the Scythians then had over them.

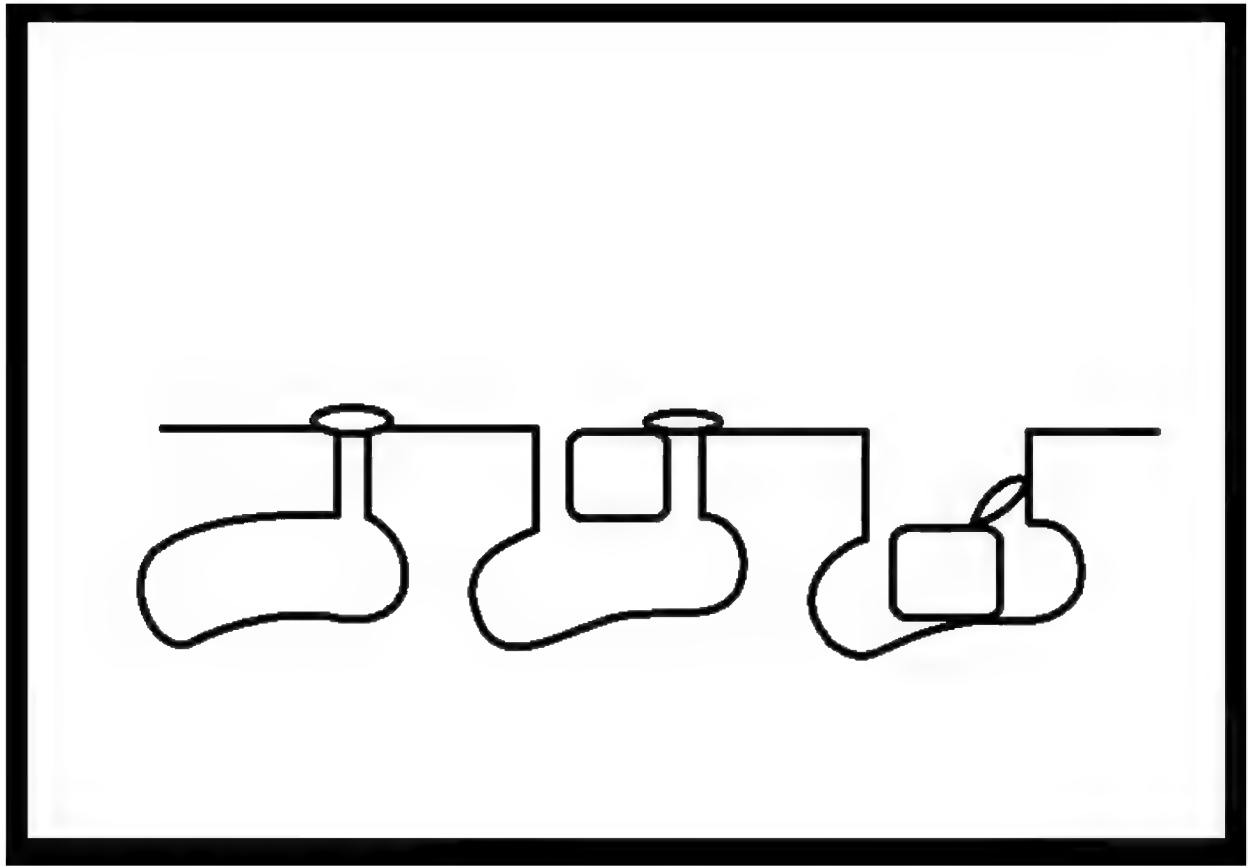


[ID: Five of the triangle figures as before, each holding a weapon over their head, and all of them facing to the East. On the left side are two white figures attacking two black figures in front of them, who attack a single white figure in front of them. End ID.]

For we see that, on the right of the picture I give, we have the Scythian and Unæn in their ordinary position of combat; but on the left we see a Unæn who has circumvaded his globe, and comes on the Scythian in a position of advantage.

The prospect of meeting their hereditary foes under such reversed conditions, inspired the nation with the greatest ardour, and a period of astronomical discovery, equivalent to that which lies between the labours of Ptolemy and Newton was traversed in but few years. The Unæns surmounted the difficulties of astronomical observation which were indeed considerable.

A tube, for instance, cannot be used in Astria – there is no means by which the opposite sides can be kept together. In order to observe the transits of the heavenly bodies, it was necessary to make holes in the earth. The accompanying diagram shows a Unæn telescope-a passage into the ground surmounted by a lens. It is obvious that the astronomer must descend to his place of observation by the same channel as that through which he takes his observations. If another opening were made, as shown in the second diagram, the earth above the chamber would fall into it, there being no support to keep it in its position.



[ID: Three simple diagrams showing excavations under the ground of Astria. They each have a thin tunnel leading downward, to a larger pill-shaped cavity. The first has this single tunnel down, which is covered by an oval disk for a telescope lens. The second and third drawings demonstrate why only one entrance can be dug: if two shafts are dug, then the roof will have no supports, and fall into the cavity, dropping the lens as well. End ID.]

To overcome such difficulties which accompanied their mining operations, as well as their astronomical observations, the Unæns applied all the resources of their active intelligence. And before many decades had passed, after the discovery of the circularity of the earth, they had gained enough information about the phenomena of tides to predict the existence of an antipodal continent, for the rise and fall of the sea on their shore was less than that which would take place if the White and Black Seas were two limits of the same ocean.

The existence of this continent rendered an expedition to take the Scythians in the rear practicable. But, though possible, it differed in its details from any other military operation ever put into execution.

The difficulties of traversing a virgin continent were in Astria almost insuperable. In the inhabited lands all the forests had been felled and the soil was covered in summer with a springy elastic cereal, which bore its fruit in a coiled up frond. Over the resilient surface afforded by this kind of vegetation, it was possible to travel with speed and comfort. But in the primeval forest the case was different.

It is obvious that of two Astrians meeting, one would be compelled to climb over the other in order to pass him. We can imagine their condition by thinking of two tightrope walkers who, since they can

diverge neither to the right or left, must pass one above or below the other. They would have the notion of right and left, although they could not make use of it; but the Astrians neither had the notion, nor if they had it could they have made use of it, all their movements being limited to such as could be executed under the conditions of their material existence, that is, of not leaving the surface of the sheet against which they slipped. If merely to pass another individual afforded this measure of difficulty, it is conceivable how great an obstacle a single tree presented to progression. It had to be surmounted as it stood, or if cut down, then as it lay, with all its tangled mass of branches.

Taking the difficulties of navigation, of the penetration into the unknown continent, the emergence therefrom, and the building of ships to traverse the Black Sea, the lowest interval of time which could elapse between the departure of the expedition and the arrival of its survivors, was estimated at one hundred and fifty years. Of those that started none could reach the goal. A part of the nation must detach itself. A band of resolute hearts, brave and bold and faithful, must be chosen for such an enterprise.

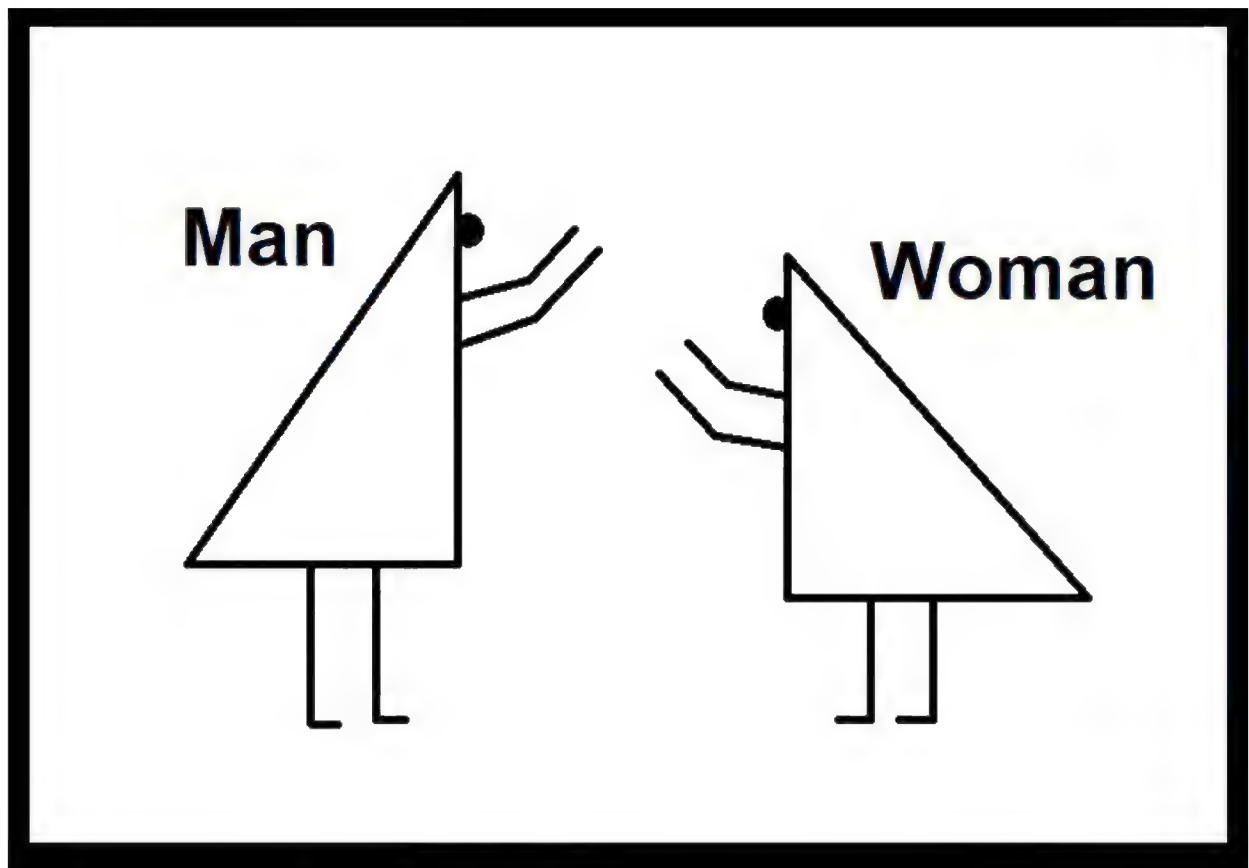
Into the incredible wastes of the forlorn antipodes must pass a chosen band. For all their lives, and for their children's children's lives, they must traverse the labyrinthine branches of a primeval

forest, with nothing of all Unæa held of gracious, fair and honourable shining on them. And yet they must keep their love for her; in the hearts of unborn generations the star must rise of patriotism, keeping them faithful in the weary way, where stage by stage they bore the burden of their country's last and only hope.

The expedition started, and all Unæa bent herself with a new spirit to the task of continuing their unequal fight. They even thought of training women fighters, a thing deemed incredible before.

In speaking of the Astrians, I have previously only drawn men's figures, which are, as can be observed, all necessarily turned to the East. To represent a woman, however, it is necessary to draw a figure turned in the opposite direction, to the West.





[ID: Two white right triangle figures like those seen before, but now with one, labeled “Woman”, facing the West instead of the East, so that she faces the “Man” across from her. The woman is slightly shorter and wider than the man. End ID.]

Thus a Unæn woman, if her weakness and timidity were overcome by training, would be rightly framed to resist an attack from the West. The natural responsiveness of men to women and women to men, which we notice in our world, exists in Astria to a very highly accentuated degree. There a man cannot see his friend's face, because it is necessarily turned from him, but he can watch a woman's face and note the changes of expression his words call forth. The Unæns showed great chivalry in their treatment of women, and it was handed down as one of the most terrible horrors of that last period of their war, that actually a serious proposal had been entertained of women sacrificing womanhood, of hurling women into the contest against the Scythian oppressors.

How well the trust confided to the wanderers over land and sea was borne, is a theme Unæn writers love to linger on. From those that plunged in the waste arose a race lithe, adventurous, daring, with but one thought, the thought of fair Unæn. At the resting places for exercise in arms, at the nightly camps, at the halting places where some beetling crag affronted them, ever and again the old story was told, of Unæn fair and distant waiting for them, and none the less beautiful and clear was the story, because their words grew few and the dialect of these wood wanderers differed strangely from the sweet cadence of the Unæn tongue.

The sight of the crystal waters of the sea, when their hundred-year march was at an end, came to them like the fulfilment of a prophecy. They built their ships, traversed the ocean, and attacked their hereditary foes with an impact in which was concentrated, in a single impulse of destruction, all the energy, grace, thought and aspiration of their race.

Their onslaught was irresistible. When they reached the confines of their fatherland, Scythia, as a nation, had ceased to exist.

By the advent of these, her long separated children, the terrible oppression which had always weighed on Unæa was removed. All her most energetic sons had turned to war, now they turned to the arts of peace.

And with the final and absolute disappearance of any power that could contest their might, a strange vicissitude of opinion took place. By the very perfection of its success the army had prepared the way for the extinction of the estimation in which it was held.

The survivors of the adventurous band, the old heroes who had held the Scythians at bay, were rewarded with gifts of land. Then Unæa settled down to think of other things than war.

It fared but ill with the majority of the old-time fighters, they were ill-fitted for business, and the alluring schemes and skillful machinations of sharper men accomplished the ruin of many.

That the army should have resigned itself and become a factor of no account, have passed from absolute dominion to become the merest cypher, was due to two causes. The general who had, by the force of his native capacity for command, come to the leadership of the invaders of Scythia, was a man named Wall, characterized by an absolute and simple devotion to his country.

Wall's saying, "Soldier and servant," became the watchword of the soldier men of the military class. So much for the personal cause.

The other reason for the quiet disappearance of militarism was the wise provision of the capitalist class, who, foreseeing the time when the struggles with labour might become acute, established as part of the constitutional institutions of their land a standing army.

The function of this army was essentially merely that of a highly-organized and very efficient gendarmerie, but by establishing a high rate of pay – for the class of work involved – and by the precaution of debarring from enlistment those who came from classes likely to

be disaffected to the prevailing order of things, the governing class prepared a very real safeguard against sedition.

The wisdom shown by the founders of the modern institutions of Unæa was amply evidenced by the subsequent course of events. After the first period of expansion was over, the versatile and enterprising genius of the people showed itself in a rapid course of organization, and the exploitation of every possible source of advantage for the organizations formed.

The working men had organizations which embraced all the skilled labour in every pursuit. The capitalists were united in organizations which controlled the supply of every kind of natural wealth. Between these two antagonistic bodies, the smaller employers disappeared.

Labour and Capital were left face to face with each other, and on the side of Capital, with its traditions for private rights, government by the best, mastery and direction of the forces of the community, stood the army, a complete protection against any attempt to set aside the constitution by force.

Class distinctions came to be founded simply on wealth. The glamour of old times, when the preservation of the national existence

rested on it, had completely departed from the army-spirit in the traditions which lived on in the army itself. The mass of the people looked on the soldiers as mercenaries in the pay of the capitalists, while the capitalists regarded the soldiers as one amongst the various classes of men who were willing to work for them for a moderate rate of pay. Such is an epitome of Unæan history preceding the period which I have made the subject of a special study.

## **Chapter 1: A Glimpse at Unæn Society**

It is one of the most interesting things I know, being a three-er oneself, to watch and observe the doings of the two-ers. Take Mrs. Castle for instance. I mention her, not because she is of any importance in our story, but as illustrating my point. She's a beauty, admitted, but that is not what gives her her vogue. It's her nicely calculated indiscretions. She blurts out things which no one could possibly believe were intentional, unless, as in the present case, he was a three-er and she a two-er.

The two-ers she talks to very likely find out afterwards that she wasn't so impulsive as she seemed. But, to me, the play's the thing, seeing exactly at the moment it happens all that there is in it, noting the effect the plane folk have on one another and how they puzzle and bewilder one another. There is always a great deal of conscious or unconscious reserve, pretence, calculation in their dealings with one another. Except in the case of Laura. She is just perfect simplicity and would always produce the effect of a two-er in however many dimensions she was made up. Perhaps that is why they were all in love with her – Harold Wall, Forest, Flower, not to mention the crabbed old historian Lake who actually disclosed a vein of poetry, talking to her.

Now, to begin my story, in which I will subordinate as much as possible the incidents and occurrences affecting mere individuals, for my theme is an episode in the life of a people.

Harold Wall was the youngest son of General Wall. He had committed the mistake of entering the Army. The glamour of the old time achievements, the traditions which lingered on in the service, and the actual duties of his profession, which he took most seriously, blinded him to his mistake till he fell desperately in love with Laura Cartwright, the daughter of one of the richest and most influential men in the state. Then it was borne in on him that he was in a profession in which there was absolutely no chance of distinction. There was no use for an Army in Unæa. He was only a kind of policeman. His father had left him what would have been considered moderate riches in old days. But in these times it was a mere nothing beside the colossal fortunes of a later period. A year of concurrence with the prodigal youths of the Capital and an attempt to challenge the Goddess of speculation had made serious inroads on his inheritance. He drew back to find that, owing to a serious and unaccountable depression in the value of landed property, it was no easy matter to meet his obligations. Far from being able to demand the hand of Cartwright's daughter with any show of manliness, the only lot he could ask her to share was the obscure and penurious existence of a subordinate officer in a service far fallen from its once



honourable place in public estimation. At this juncture Cartwright, in his official capacity of Secretary of State, offered him the post of Governor of the Colony it was planned to found on the uninhabited shore of Septentria. He urged his acceptance on the ground that it was fitting one of his name should lead out the first settlement to that distant region, and told him that the mere fact of his being at the head would be the most favourable augury of success in the public mind. Wall had consented. He accepted the post. And now he had come to one of the open air entertainments so fashionable in Unæa hoping to see Laura, to have some words with her, to have a little talk which he might remember in after years. On him, evidently very desirous of being let alone, descended Mrs. Castle, determined to find out all about his reasons for making an exile of himself.

"Why, Mr. Wall, I have not seen you for an age – and is it true you are going to Septentria?"

"Yes, Mrs. Castle."

"I said I didn't believe it, you can't really mean to throw yourself away like that."

"I consider it a fine opening."

"There's no accounting for tastes, your father went there, so I suppose it runs in the family – but he had companions, there was an object. You will have no one but ploughmen and labourers."

"In the course of time Septentria will be as great a country as this."

"Oh yes, but meanwhile – Mr. Wall, don't go."

"If anything could keep me, I'd remain."

"But, seriously, why should you go? No doubt Mr. Cartwright has talked you into it, he can persuade anybody to do anything."

"On the contrary, it's a great opportunity, and I am much obliged to Mr. Cartwright for the chance."

"Why, Harold, where have you been all this time?" It was Laura Cartwright who spoke, and, seeing their meeting, a sudden intuition came to Mrs. Castle which seldom failed her when there was an opportunity of mischief. She made the brilliant conjecture that Cartwright had offered Wall this distant post in order to remove an unwelcome suitor. She went as near expressing her thought in words as she dared.

"Oh, Laura dear," said she, "I was so glad to see Mr. Wall, but what do you think Mr. Cartwright's done. He's simply forcing Mr. Wall to go to Septentria just when we had a chance of seeing him often," and she fluttered off.

To the bewildering vision in a filmy lavender-tinted cloud, incredibly daintily arched hat, and with clear inquiring glance, Harold said apologetically: "It's difficult to explain things to Mrs. Castle."

"So papa wants you to go to Septentria, Harold?" she said, looking at him with an air of dainty inquiry.

"No, not at all, but since I couldn't stay here, he put the opportunity in my way."

"I don't see why you couldn't stay here," said the girl.

"It isn't practical," said he.

"That's what you say when you don't want to explain. Now tell me that there are business reasons which a silly girl couldn't understand."

"No, Laura, not at all. There is a mortgage on my property which must be paid."

"Well, Harold, sell your place; it's very valuable; you don't want so much land."

"I have tried to. I cannot get more than enough to pay off the debt."

"Harold, wherever did you go? It depends on where you went and how hard you tried."

"I went to the State bank – it holds the mortgage."

"That's another name for papa."

"And to the Persepolis Trust Company."

"Papa is one of the directors of that; of course if one of these companies tries to beat you down they all join in – Harold, I wouldn't sell."

Harold brushed away her remark. "The property is not worth so much as it was. Your father has put an opportunity in my way by which I can leave everything comfortably settled."

A flush, rosy with the self-luminousness of dawn, it-radiated her face, the soft dimples were almost lost in this new effect of colour. She knew she looked heart-less, but her little triumph of making

Harold Wall tell what he did not want to, and the consciousness of her power over him were too delightful.

"Well certainly, Harold," she said, "it does look as if papa first tried to drive you out, and then rewarded you for going away. Whatever can the reason be?"

"It isn't likely," said Wall, "that your father concerns himself with my affairs; besides he told me that personally he would be very sorry to have me go."

On Laura's face came an expression of a slight degree of incredulity.

"There's no reason. Whatever reason could there be?" he said.

"Don't ask me!" said Laura, demurely, "I am only a girl and I couldn't see an inch into my father's plans however much I tried. I suppose over there you will go about in skins when your clothes are all worn out; they will be nice and warm these cold winters. Now, Harold, when you come back, I shall be quite an old woman and very chilly, promise to bring me a nice lot of warm furs." So saying, she went on her way.

No doubt this allusion to her feelings in the future was a mere chance expression on the part of the girl, but Harold felt as if the sun might shine and the earth blossom for all his lifetime and he never see it, if when he came back Laura were old. He was conscious, too, of having been found unsatisfactory by this fair maiden, and the conversation had not been what he had desired it to be. He wanted a long quiet talk for this their last, so that in after years he might have plenty to remember, plenty to live on. But there wasn't the slightest satisfactoriness in their conversation. There had not been the slightest note of renunciation about Laura, or of appreciation of it in him. And yet, if he saw her again, what different could he expect!

Mr. Cartwright at this moment approached near enough to Harold to recognise him and said, "Glad to meet you Wall: there are one or two matters which I have put in a sealed letter, to be opened next year. The winters are getting so much colder that I can't feel certain of the ocean being free of ice long enough for a passage till late in next summer, and I do not want to defer these topics indefinitely. And that reminds me, you can make a considerable addition to your salary by shipping furs over here; get hold of all you can. According to the weather bureau, we are in for a spell of hard winters."

Harold was about to say that his duties as governor were inconsistent with a private venture of this kind, but Cartwright left him no time.

"No thanks," he said, "it's what I like to see; some energy and commercial enterprise in young men. Has my daughter passed you?"

All around a ripple of conversation, never very serious, always animated. These flats, to use the word by which they spoke of one another – not with any notion of disparagement, but to express the utmost fulness of being, these flats had a variety of the most lively interests, and no subject was too serious for them to touch on if it was introduced in a light and airy way. Social reforms, the last discoveries of science, the newest theory of the State, all were welcome topics lending variety to the gossip of politics and society.

Literature had almost ceased to exist, for the poor were too hard pressed by the exigencies of their daily life to read, and the rich were too much occupied with pleasurable distractions to peruse anything which exacted serious attention. Science on the other hand flourished, prosecuted by an able class of specialists, and on science all looked with respect, even those most incapable of subduing their lively spirits to its exacting monotony of concentration.

"Let us listen to what he is saying," said Agatha Harcourt, looking towards a fashionable philosopher of the latest style, surrounded by a little group of women.

"What is the good?" asked Forest, "he would only give you theories, I can tell you how they work out."

"Then let us listen to him first so that I know what the theories are," said she.

But Edward Forest had no intention of letting Agatha listen to anyone but him.

Forest was a good specimen of the young flat of wealth. He had many likeable qualities, and a most delightful habit of expressing himself with perfect freedom. He had never known necessity of any kind, or what it was to go without anything he wanted. Happy himself, he wanted to make everybody happy, and except that he had lost the faculty of being quite in earnest about anything, might be accounted quite perfect.

He took great pleasure in his conversations with Agatha. Most girls' minds were like limpets, they had rather be pulled in half than be taken from what they clung to. But he could move Agatha's mind bodily, take it up and set it down in a different place. If he could have concentrated himself on any one subject, he would have become a professor for the pleasure of seeing Agatha's face as she listened to him lecturing. First of all would come an expression of



wonder, then of a slight bewilderment, then she gently settled down on the new conviction and made some little remark showing her perfect acceptance of the new facts. She had the genius of belief, and belief is, after all, the prime factor in knowledge.

"His theories are very simple," he said, "he's a moralist of the new school and tells you that instead of listening to the voice from within, you should listen to the voice from without."

"And lower your ideals?" said Agatha.

"No, raise them, the moralists have been asleep, the march of civilization has passed them by. Think of all science has done, its made our environment, and all we can do is to rise to the demands on us."

"I like that," said Agatha, "it shows how great science is."

"Yes," said Forest. "If we don't manifest intelligence, we should be run over or crushed to pieces every hour, we live so close packed together we have to treat one another well, and the post puts us in communication with the ends of the earth, so we have to think of the whole; it's a wonderful theory, but I've had a terrible time in trying to carry it out consistently."

"I didn't know you were a disciple."

"Oh, an enthusiastic one."

"Well, tell me," said Agatha, "how do you carry it out?"

"One of the first things is to bring business methods into the home circle. Now I haven't a circle, so I just begin with myself. For instance, you know how bankers and other business men, when they write to you, send you a paper and all you have to do is to sign it, that's the method I use in my correspondence. When I write to a friend I enclose an answer, all he has to do is to sign it. You've no idea what satisfactory answers I get."

"But," said Agatha, who was nothing if not conscientiously logical, "you said you had a terrible time."

"Yes, it was this way," and Forest went on to tell her how, wishing to ascertain the state of a certain young lady's feelings towards him, he had enclosed half-a-dozen letters for her to choose from, wishing to be very fair. But the girl in question had been as averse to reading as to writing, and, thinking he had made her a present for her use in her correspondence, had sent the letters impartially all round to young men of her acquaintance.

"It made a terrible lot of complications," he said. "Yes, it would," said Agatha, "but not for you."

"Think of my feelings – I may have caused an ill-assorted union."

"Was that the last one before Laura?" she asked. Forest looked at her with an expression of more irritation than she believed him capable of showing.

But he soon recovered himself. To the favoured of fortune, life in Flatland was indeed delightful. It is a mistake to suppose that thickness is essential to the display of nature's most prodigal gifts. Regard the loveliness of blossoms, the irridescent beauty of gossamer threads, the opalescent hues of tenuous layers of pearl. It is in the thin and unsubstantial that nature puts forth her supremest effort, and in these people, all thin and unsubstantial, nature had found a field suited for her abilities.

And so, his feeling of irritation past, no words could be better chosen than those in which Forest touched on his feelings for Laura, and his determination to hope and persevere. And no delicate comprehension was ever shown more consolatory than Agatha supplied. But she was serious herself, and tried for kindness sake to draw him from the thought of his passion.

Agatha had studied science and knew that there was much beyond the pleasing effect of a beauteous outline, she tried to lead Forest to those delights of mind he had often shared with her. "Edward," she said, "it is not what Laura is in herself you care for, it's always how she looks, your love for her is superficial."

"And so it's real," he answered, "there's nothing in that old fiction of a substance. I don't want to account for Laura, it's what she is I care for, she's the essence of all being, all loveliness."

Much as Agatha sympathised with Forest she had no great faith in the fortune of his suit. She sighed gently and reserved her efforts for a more propitious occasion.

As he walked from the brilliant assembly, Harold strove to banish Laura's image, and called to help him all the carping disparagement he could find. But her sweet graces vanquished all his halting arguments. And, indeed, the days were not so very long ago when as boy and girl they had played together – once there was not this difference – it was something then to be his father's son, and Cartwright was but one amongst a number of pushing, energetic men of business.

Now Harold could, perhaps, hope to make as much as one of Cartwright's valets or gardeners, and outside of wealth there was no avenue to distinction. The opportunities to make money which once had existed had been covered up by the organizing abilities at the head of the great companies – nothing remained for independent adventure.

To enter the service of one of the great companies and work up into a position of confidence was the only way in which men became rich nowadays, exceptions being made of the lucky inventors and skilful lawyers.

He could realise the polite incredulity with which her father would receive a demand for his daughter's hand – the entirely reasonable way in which he would allude to a boy and girl fancy which ought not to be used to his daughter's detriment. Every time he met Cartwright he felt a revolt of pride at the man's manner. Another proof, he said to himself, of how little fitted he was for the ordinary opportunities of advancement.

The leadership of the Colony! That was indeed a piece of good fortune – incredibly surprising. He ground the stones beneath his heels, thinking how, if he had not known her, the adventure over the

ocean would have filled him with joy. Now he thought of it as a kind of death.

"Hullo, Wall, when do you start?" It was the socialist deputy to National Convention who addressed him.

Wall told him the state of the preparations.

"I'm glad you are going, we have one less to reckon with."

"Come with me, then you will have only one to reckon with."

"No, I'm safer here; do you suppose you'll find this state of things still going on when you come back?"

"Certainly; you have large masses of the city population with you, but the army can account for them. The rural districts are against you, and whole sections of labour, if you come to it."

The member replied angrily, "Yes, the capitalists have bribed certain sections of us as you say – they let them share in preying on the community, and think they have them body and soul. But we shall break them up."

"Even then you will find it takes a long time to change the existing order of things."

The deputy recognised the justice of this observation. In Astria, owing to the limited possibilities of movement, a well-armed and disciplined force was very much more efficacious than with us. Being unable to contradict Wall, he contented himself with saying:

"Then you mean to say the present state will last as long as your salaries are regularly paid?"

"Yes, if you like to put it that way," said Wall.

"And who pays you? For instance, who pays you, Wall, individually, for taking out these poor creatures to starve?"

"The Bank of Commerce and the Amalgamated Mines."

"Not a bit of it, *we* do, the people you keep under. You know how the price of coal and oil went up this last extraordinarily cold winter?"

"Yes."

“Well, the price isn't going down. The bank and mine owners have decided to keep up those prices permanently; they've made a sinking fund to recoup all the expenses of your expedition ten times over.”

Wall had a soldier's dislike of government by the people. His conception of the State was a disciplined body working together under direction. The oligarchy which practically governed Unæa certainly used the economic forces to apply compulsion; it supplied discipline and direction. But Wall may be pardoned for wishing that they were not of such pronounced financial ability.

At his quarters, Harold found a lively discussion in progress. It was one of the evenings when the younger officers met together to dine and talk. For all that they bore externally the semblance of an inflexible, unthinking instrument, yet amongst these soldiers the conversation at times ran freely.

A young man, named Beam, was telling a fanciful story when Wall entered.

"From the plains of Elysium were sent across all the dangerous wastes on the way a gentle and beautiful tribe of sheep to dwell on this earth, then uninhabited and fertile. To guide them safely the Great Shepherd provided a guard of dogs, fleet and fierce, with long



fangs and untiring limbs. Through many a battle they brought the beautiful and gentle tribe of sheep to this earth, fed on the way by the commissaries of the Great Shepherd supplying both sheep and dogs with food suited for them.

"But on the earth where the luscious grass grew thick, the sheep spoke to the commissary of the Great Shepherd saying:

"`Here is food more exquisite than that we had on the way, we need no more from your hands.'

"`And the dogs?' asked the commissary.

"`If the ungrateful animals do not relish the food of this exquisite earth, 'tis their own fault,' replied the sheep; `besides their task is done. What further use can there be for them, on this safe-guarded earth – what foe can come nigh us? '

"So the commissary withdrew.

"And while the beautiful peaceful sheep nibbled the grass of the earth, the dogs lay faint and dying. One old worn-out hound could drag his limbs no more, and to him a lamb came, and with the sportive grace of its kind kicked with its soft white legs at the

muzzle of the decrepit useless dog. The tender foot was entangled in the old hound's fangs – the starving jaws closed upon it, and food and life better than all that had ever been given him coursed through his veins. Invigorated, he rose, and going to where his brothers were lying, waiting for death, he lay down amongst them. 'Where have you found food?' they asked in surprise. 'I have eaten a lamb,' he replied. They viewed him with horror, but some of the younger ones soon after pulled down a sheep.

"And the race of wolves arose – a race justly handed down to execration in all the tales and histories and stories the sheep have told, but it is no less just to tell its origin."

Wall was in a very bad humour. When the speaker had finished, he rose up and said:

"Beam, you would wait till I was quite dead before you kicked me in the mouth." His hearers remained silent awhile, then burst into laughter. There was something inexpressibly sheep-like in Beam, when they thought of him in contrast with Wall. They recognised that lamb and wolf were differences of individuals, and the specious distinction which Beam had made between the army and the rest of the community was unmasked. With a kind of shiver, that little group of soldiers turned from the theorists and agitators who had

begun to influence them, back to the old simple lines of loyalty, that capacity for personal allegiance which was like the flame of life in the service.

"Speak to us, Wall," they cried, "bid us good-bye."

But Wall said, "No, I'm going to turn in," and left them.

He found it impossible however to sleep. In the darkness and inaction he felt as if a great black pall was holding him in its folds, for ever cutting off every ray of light, and he recognised what had become an elemental fact of his being, that without Laura all the joy and hope of his life would be gone for ever. He rose and sorted a mass of papers relating to the Colony, making notes and calculations as he went on seeking a refuge in work. As hour after hour passed he deadened his pain in his labour. When he threw himself on his bed in the early morning, there was a report written for Cartwright's eye, containing his final recommendations, and estimating that everything would be in readiness for the voyage in little more than a month's time. It was but scant consolation, but he treasured the thought that his letter would enter her house, perhaps be seen by her.

Laura Cartwright, too, could not sleep. She cried at first, from pure vexation and impatience. "How stupid he is, can't he understand? I

wish I could make him feel; he is going with no sign of regret; if only I could make him one little bit sorry!" But as his face rose more clearly before her, he did not look so very happy after all – only resolute and proud. "Ah! if it is his pride, it is more hopeless than all – that could never break."

The birds began to sing. She went to the window. There in the sky hung the bright planet Ardaea, the lovers' star, almost defying the light of dawn. Never before had Laura seen her so conspicuous and large.

"You shine on him too," she said, "after all, he and I are in the same world." A mysterious sense of nearness wrapped her round; as it were an unfathomable message came to her from within: "We belong to each other – he is mine and I am his by all that is best in both of us. This very minute I know he is thinking of me. There never was a time when, at the bottom of my heart, I did not think of him, and there never will be a time when we do not think of one another."

From the land-locked bay of girlhood her little bark passed out on the deep waves of womanhood. The winds were adverse, the sky was sombre, but in the great change her girlish sorrow fled.

## **Chapter 2: The Statesman**

From the garden party, Cartwright proceeded to a meeting of some of the most active members of the oligarchy which really directed the affairs of Unæa. On his countenance was not the expression of content which befitted one who had attained the summit of his ambition. Starting in life as a lawyer without fortune, his counsels had proved valuable to the great company by which he was employed, and his own business ventures had been successful; latterly there had been some talk between him and the greatest capitalist of the land – Forest, of an alliance between the families. Being a man of infinite watchfulness he had made no decided answer, but had begun to prepare the way. He sounded his daughter artfully, watched her closely, and discovered to his consternation and surprise that she thought more of Harold Wall than was in any way befitting. Consequently he judged it best that young Wall should disappear, and that the old ties which dated from the earliest state of his fortune should be definitely severed. Now Wall was going. That preliminary was settled, nevertheless his countenance was forbidding, and he responded in a curt, pre-occupied manner to the welcome he received from his colleagues in their informal council. The members were more versed in the arts of acquiring riches than administering a State, but their increasing responsibilities had been

met by them in the same spirit of resolute activity with which they had advanced their own fortunes. With an insight born of long experience in the selection of human instruments they recognised in Cartwright an intellectual penetration, a width of view, and a profound and watchful caution in which they could place implicit confidence, hence his position of predominance.

The proceedings of real moment were delayed, as in every assembly is sometimes the case, by the intrusion of a personal idiosyncrasy. A young man who had recently come into the inheritance of his millions spoke long and earnestly, dwelling on the straightened condition of the masses, the increasing concentration of wealth, and advocated a system of religious communism.

The speech wearied all present by its repetition of impracticable views, the chairman looked at Cartwright with an enquiring expression. The latter having something to say, not connected with any business in hand, took the opportunity of his reply to introduce it.

"We welcome to-night," he said, "a new accession to our body, and welcome no less the opportunity of reviewing the fundamental propositions of social science which has been given us, for we are generally too much absorbed in the contemplation of the next step

forward to question the expediency of altering our whole path. For my own part, to take my own rough and ready way of looking at these questions, I think that the weekly wage is the greatest force in the world. Give a man his weekly wage, put him at his task, he asks no questions but goes straight ahead. Multiply that man by thousands, you can level mountains, cross seas, make science and art. Nothing is too great to be accomplished. We have the power of directing that force and we should be cowards to shrink from the responsibility of it. I have no wish to see Astria a world of idlers voting themselves each year shorter hours and more pay. That will never come to pass – if the power passes from our hands it will but fall after a period of struggle and bloodshed into other hands. Human nature requires the iron bonds of compulsion, and the necessity of earning the weekly wage has taken the place of the primitive struggle with nature and the warfare of later times. If you have any notions of benevolent import it is open to you to carry them out by your private resources – the structure of society is too vast for you to do much harm. The whole efficiency of our race depends on the drive which some of us, at any rate, intend to keep up. Our safety depends on it too." And then he turned scowling to the whole body assembled there. "You, all of you, know that there has been once every fifteen years a periodic disturbance of our climate, the winters becoming colder, the summers hotter." At this remark every one bent forward in interest. "This change has been attributed to the influence

on our orbit effected by our conjunction with Ardaea. For the past five years I have had a number of astronomers working at the problem, and they make out that the next conjunction will have a still more pronounced effect. It is no empty theory. I sent the figures to my brother, and crank though he is, he is well able to tell what they mean. He wrote me a lot of nonsense about his own theories, trying to make an occasion to have them considered, but the essential fact is that he can find no flaw in the conclusions. This is the epitome of the danger. The winters will be so cold that we shall need an enormously increased supply of fuel to make life endurable. On this account I have checked our present consumption by increasing the price of oil and coal. The heat of the summers will rise, lakes and oceans will be licked up as by a tongue of fire, our crops will be seriously affected; we may have to change the source of our food, certainly the supply will be short. In view of this, as it tends to relieve the congestion of our population, I am glad to say that the prospects of colonization are favourable. I have secured young Wall as leader; his name carries weight with the masses, who, despite their poverty, have a singular reluctance to travel to new regions."

Pausing a moment, he gazed with his intellectual vision at the prospect in its nakedness. The danger as he knew it, loomed so vast in comparison with the picture he had drawn that a sudden emotion



seized him. He gave vent to it by turning on the occasion of his remarks:

"Meanwhile, with kind heart and benevolent feelings, you preach universal comfort and ease. I tell you it is, as in times past, only the desperate necessity of the individual and his final struggle, whether it be in labour of his hands or in science, that our world will live. Do you suppose that, in the regime you would introduce, anything difficult at all would be done?" The members knew Cartwright too well to look on him as an empty alarmist, and accepted his warning as one to be seriously considered.

"The prospect," said one, "is threatening, and we must take all due precautions; as one of them I would suggest the inadvisability of letting these prognostications be generally known."

"They are absolutely confined to ourselves. I will answer for the men who have made the calculations," said Cartwright, "in the minds of the public is nothing more than the experience of the climatic changes and a vague connection of them with the neighbouring planet. There is a notion of a providential equilibrium of our system which has prevented any general apprehension."

The meeting then broke up as a whole, but Cartwright remained till morning discussing with a committee the formation of a corps, composed of the descendants of the aboriginal Scythians, who could be relied upon as mere blind instruments. Armed with a new explosive which the chemists employed by the board had invented, he showed how these men would be able to carry out the decrees of the executive even if the regular army could not be relied on – a contingency not probable, but to be guarded against, since there were signs of a freedom of opinion and a discussion of topics entirely discordant with the old traditions of the service.

### **Chapter 3: Father and Daughter**

It was morning before Cartwright reached his home. A few hours sleep sufficed him, and by the middle of the morning he was in his library looking over his letters. Laura came in as his breakfast was served. He greeted her genially. Her flowing white morning dress, with its quantities of lace, enhanced her beauty – the treasure of his house, not to be surrendered lightly!

"Papa," she said.

"Yes, dear? How well you look this morning!"

"Thank you. Don't be nice, I want to scold you. I heard what time you came in last night."

"I couldn't help it, Laura, it was necessary. A young man made a speech, and I had to reply to it."

"But if a young woman makes a speech you won't find anything to say; you know you are very naughty, Papa; you ought to have left him severely alone, like you do me. Why there's a letter from Harold." Had he written to ask her father to let her go with him?

Mr. Cartwright slowly opened and read Harold's letter.

"What is it about?"

"A little matter of business connected with the Colony," he replied, putting the letter in his pocket and reaching for another.

"Tiresome business," she said, sitting on his knee as she used to do as a child. He was a patient man. He knew perfectly well that she put her head on his shoulder because Harold's letter was in his breast pocket, yet he gave no sign of irritation.

"You have grown up so rapidly, Laura," he said, "that I almost forget it isn't a little irresponsible girl I am talking to. When I was your age I denied myself all pleasure and gratifications – it was all work. I don't mean to say that I lived the life of a hermit, but I chose my friends and associates amongst those who had the same ideas and ambitions as myself. You would have found our talk interesting. We studied hard; we wanted to do something for our country, we were bent on preparing ourselves for the position we felt we should some day occupy. Don't imagine I'm reproaching you, Laura, I like you gay and happy, and I delight in all your friendships; but I want you to think of something else as well. You should come oftener and talk to your old father, and let him tell you of the things he is planning. A

daughter should enter into her father's life and then, my little girl, you would find it useful, for some day, you know, you will marry a man who, like me, has the cares of state upon him. I don't want you merely to be his relaxation, but the companion of his graver hours as well."

Laura's heart sank and sank. She had come in intending to say something to her father – she did not know what – but now the fountain of words dried up in her.

Circumstances, circumstances! We are the creatures of circumstances, and it is natural when we realise our impotence in the face of them, to scan these circumstances closely.

Laura had led a life of unthinking happiness, loving to please. The slight traces her education had left were all swept away by the demands of the opulent society she moved in, exacting in its women, first of all, a delight in things – for things they could give in profusion and without number – exacting also a vivacious interest in the trifles of the moment, quickness and subtle responsiveness, and the charm and beauty and grace that comes of not being centred in themselves.

Swept on in the current that bore her, Laura might never have realised how out of herself it was, how passively she floated, how she was made and placed and treated, loved and led as a part of the world's human furniture, had she not, wayward and questioning, gazed on a man who, as it were, stood steady and strong on the bank, not borne along in the gaily eddying stream.

But the bowstring had twanged, the arrow had sped, and, with the coming of the humbly entrant monarch, all changed – the streams of fetes and talk, the occupations, interests and people of her life all seemed somehow different, all were circumstances on which she gazed with new inquiry. Her father held her, her life held her, a dark unspeaking distant parting man held her; bound and helpless, she looked on circumstances the masters of us all, and, looking on them, was seized by a sudden passionate craving to look deeper within them.

Is love a limited passion of one for another that surges and ebbs and dies? Ah, no!

Hardly a venture of the spirit, hardly a glimpse into the unseen but is to be traced in the origin of it to this same love cruelly entreated. For it is of its nature undying, and the loved one removed, its unstaying wings beat on. The unknown, the mysterious horizon, all that lies

beyond the confines of thought; that, all that, is entrancing and of irresistible enticement to the hapless lover.

And Laura found the happy light laughter of her cavaliers, and the showered bouquets and the smiling courtesies all unmeaning now. Somehow she turned to graver men and women, seeking that which, the wide world over, hangs above the unfulfilment of a destiny.

## Chapter 4: A Dinner Party

The greatest luxury with which the Unæans surrounded themselves in their dining-rooms and banquet-halls was mirrors. From the exquisitely polished line surface of these mirrors on festal occasions came, obliquely reflected, the image of one participant to another, and the throbbing ingenuousness of the vis-à-vis conversations in which the Unæas attained a conspicuous eminence spread itself like a delicate bouquet, spurring each by the reflected glimpses and half-heard tones of his neighbours to explore boldly the treasures his partner's conversation had for him.

Cartwright cultivated the reputation of an ostentatious and omni-collective hospitality, for it enabled him to sound and test and understand so many diverse minds and take note of all the variant phases of Unæa opinions.

It is therefore as good an occasion as any other for obtaining a glimpse of the manner and customs of Unæa if we observe the guests at one of Cartwright's banquets, the more so because with Laura's turn to seriousness, and the complaisance with which her lightest wishes were treated, we may succeed in eliciting something more than the graceful expression of elegant trifles from her companions.



Let us take them at random, these men and women lapped in the arms of Unæan luxury, as they conversed with one another in this scene of light and flowers and radiant beauty.

Sylvester Barr, making a low obeisance, handed Julia Castle to the seat opposite him, quoting from an old poem:

"From the dying rose its soul has fled

And blooms above, divinely red."

"Why, my rose isn't a bit withered," said Julia, looking down at the flower in her corsage, pretending not to observe the allusion to the brilliant colouring of her complexion, in which (perhaps the greatest beauty of Unæa women) she reigned justly pre-eminent.

"Neatly parried," he murmured, "and I see that I am to be shut out beyond the outermost frozen portals."

"Quite the very outermost," she said.

"'Tis ever thus," he sighed, "I was ever misunderstood from childhood's hour."

"And so you cultivated your remarkable plainness of speech. I think, Mr. Barr, the thing we have to be most thankful for, is that there were poets before you."

"But why?"

"Because if there weren't, people would have to quote such embarrassing things."

"But are you sure," said Sylvester Barr, "that there were poets before me."

"It depends on what you call poetry," said Julia.

"Why poetry is the soul in love with matter," said Sylvester and, presuming shamelessly on Julia's limitations, added, "most of the classic versifiers were old men, and those that weren't were delicate."

"You impute that to them as a fault?"

"Why yes, youth and passion are always indelicate; we are stifled with the sayings of death."

"But why should you call the works of old men the sayings of death?"

"Mrs. Castle, it is not generally known, but death is not a sudden event, it comes on gradually; do you suppose a poet lives on in an old and feeble body – no, he leaves it for eternally renewed youth and loveliness."

"But you will grow old."

"I – no, not I – not the I that talks to you – that part of me, perhaps, which keeps accounts and hires conveyances. I shall be gone and of all beings I detest that relic to whom I leave my clothes and clubs and debts."

"And your reputation?"

"Yes, poor fellow, I almost pity him when I think of him trying to pose and moralize with that behind him, and his old cronies chuckling. Think of him with that mitigated hostility he calls friendship, the decorum he calls love, the sparkling eyes of folly closed – ah! what will you and I be then? We shall be far away. "

"Mr. Barr! I have never been asked to elope in such a curious way before."

Mrs. Castle's charming confusion when she recognised what an admission she had made, placed Barr on the best of terms with himself and her. He pursued their conversation in his most animated and adventurous manner till it was time for them to part.

Agatha was the one of the plane folk whom you would, I think, most have liked to meet. She was a light weight, it is true, but she made such fine running. She was as affected as she could be, but believed in her affectations with such a whole-hearted simplicity, as robbed them of all their littleness. She was a true specimen of unencumbered womanhood, who, acting, forgets she acts. What she really was, was an enigma, but she was always willing to follow where merry thought fools it with the tinsel stars. At the present stage of her career, she imagined herself to be an agnostic and physicist, with her faith firmly fixed on atoms and the conservation of energy. If I am somewhat incongruous, it is because it is impossible to be congruous when speaking of Agatha.

She had excited a lively interest in the great Brand. One of the problems which occupied the powerful but slow moving mind of this great chemist, was how to complete her scientific education. Of

plebeian descent, he was dazzled by Agatha Harcourt's delicate hands, her aristocratic friends, and could never make the slightest approach to rebuking her or reproving her for anything she said. He tried to sow the good seed of precise observation and exact measurement, but tares unaccountably were mingled with the good wheat, and the crop he reaped was such as occasionally to make him despair.

She and Forest were seated together and had gradually passed from superficial observations to subjects which Agatha considered herself to consider really interesting.

"I have just been talking over a remarkable discovery."

Agatha settled herself comfortably in her seat. Of all the men she met at dinner parties, Forest was the nicest in accommodating himself to her scientific enthusiasms, and she used to beam gratefully on the ancient clippings from scientific periodicals which he rehearsed for her benefit. She would not, for the world, have diminished his sense of the interest he inspired in her, by letting him know that they were not perfectly new to her.

"Oh, tell me," she murmured.

"It is really very difficult," he answered. "It's about cause and effect."

"You can make everything plain."

"Well I will try, and if you don't understand, it's my fault."

"No, mine."

"At any rate this is it. You know that the earth goes round the sun, and does not fly off into space because the sun pulls it. It's as if there were an elastic band between the two and the sun was automatically pulling it."

"Yes," said Agatha, "that's gravitation."

"Now, if you think," said Forest, "you will see that if you were pulling an object by a string, its course would depend on how long the pull you exerted took in going. The pull does not act all at once at the far end, but travels along the string as you can see if you pull a long rope."

"That is clear," said Agatha, "I have heard all about that. Gravitation is propagated from the sun as a centre, and people are trying to find out how fast it goes."

"Quite true, it used to be thought that it took no time at all, but now they have discovered a very curious thing."

"Is it very quick?"

"Very, it takes less than no time, it gets to the end before it starts. That is, the earth begins to change its course before the pull comes."

"Oh, that's impossible."

"You may well say so. But in astronomy observations of the greatest precision can be made, and there is now no doubt of the fact. We must not think what we please, must we, Agatha?"

"No," said Agatha, "we must see what happens and think accordingly."

"Well then," exclaimed Forest, "see what a wonderful discovery this is – what a light it throws on the relation of cause and effect. You know cause and effect are known to be related, and it is generally supposed that the effect comes after the cause. But now where the relation has been definitely observed, it is found that the effect comes before the cause, and what is true there, is true in every case."

"But how can that be?" said Agatha, knitting her forehead in the intensity of her thought.

"You may well ask, but as Brand says, in science we must follow facts not say what they must be, and now we have to look on all the laws of nature in a new light. I can tell you something which proves it too."

"Something I can understand, Edward?"

"Oh yes – I have told you a great many things, haven't I?"

"Yes, I've learned a great deal from you."

"Well, haven't you sometimes had a feeling that you knew them before?"

Agatha looked at him enquiringly. "Well, yes, perhaps sometimes I have."

"And doesn't that prove it," he answered triumphantly, "the effect comes before the cause – you knew those things before the cause of your knowing them – my telling them – took place."



"Why, yes," said Agatha, "listening to you is like reading a great author; everyone says, 'that's just what I always thought but never said.'"

"Exactly," said Forest.

"But," said Agatha, "wouldn't it mean that we were going backwards?"

"Nobody can tell what it leads to," he replied. "It's like the discovery that the earth wasn't the centre of the universe, it alters all our notions."

"Oh, do go on," said Agatha, settling down to enjoy herself tremendously. Forest's face assumed a serious and solemn expression. In his gravest tones he said:

"People need be anxious no longer as to whether there is an end and purpose in the world. You see of course there is – for the effect comes first, and also, less important but still interesting, it tells the size of an atom."

"How does it do that?"

"Why, the smaller the causes the more nearly they coincide with their effects. Now, matter is the cause of itself, and we have only to find how small a cause must be to coincide with its effect to find the size of an atom which is the bit of matter that really exists by itself."

"I'm so delighted you have told me all this, won't Professor Brand be astonished when he sees it all in my next essay. You don't mind, do you?"

"Oh, no, he'll think you got it by thought transference from him."

"I believe I do think that way," said Agatha, "I can think so much better when everyone round is talking and happy as they are now, things seem so clear."

"Of course they do," said Forest, "on an exhilarating occasion like this. See how interested Laura looks in what Mr. Lake is telling her."

"Yes," said Agatha, casting a look in a mirror which reflected a man in the prime of life and Laura perfectly absorbed in what he was saying, "her father has been scolding her for being frivolous, and she is just wild to get anyone who can talk to her seriously."

"There is something inexplicable in Laura," said Forest, "something that defies cold analysis – you will understand what I mean, Agatha, when I say she is like a body that rotates about another centre not its own. When you talk to her she rotates about you and the centre of her being is in you. She catches up your ideas, they have such an effect on her that an extraordinary sense of power and influence comes over you. That a girl like her who sweeps all her companions along with her in her gay vitality should be centred in you, is a phenomenon the inexplicability of which is lost in a sense of its satisfactoriness. And her direct simplicity all the while makes you wonder what her orb would be capable of if the centre about which she really rotates did make its appearance."

"You haven't hit Laura off badly," said Agatha.

Laura was indeed engaged in an interesting conversation. She was sitting next to a celebrated historian and, after a few amenities, she said, "Mr. Lake, I have always wanted to ask you a question – we read your books at school because you wrote them, but why did you write them?"

Mr. Lake answered, crustily, "I wrote them because I was well paid for doing so, so much work so much gold, as in everything else."

"You remember the place," went on Laura, sweetly, "where you say that the Unæas became more civilized than the Scythians because they found gold near the surface, and so trade arose?"

"Yes," he answered.

"But I have heard some mining engineers talking to papa, and they said there was just as much gold near the surface, and more in Scythia than Unæa. I always thought that we became civilized because we cared more about finding out."

"The child can give a pat with her claws if she does draw the velvet over them directly afterwards," thought Mr. Lake. He was, in fact, ashamed of the brilliant and superficial generalization of his youth, and far from being offended at Laura's detection of one of them looked at his young interlocutor with interest. He had often envied the young men of fashion their passages at arms with dazzling beauties, now it was his turn to pursue the windings of Unæn history with so beautifully undulating a throat, a voice so sweet, a gaze so clear – everything comes to the man who waits, and labours while he waits!

"It was that aim of finding out that moved me," he replied. "You know the waters are sucked up into the sky and fall in rain, that gives

life to the earth; and the same exhalation of our spirits in the vast unknown falls back in definite knowledge, that means our life and civilization. You find this again and again; for instance, it was what you might call a mere movement of curiosity that resulted in the marvellous preservation of our State."

"You mean when they found out that the earth was round?" she asked.

"Yes, and travelled round it, and I began to study history so that from the past I might be able to tell what was wise to do in the future."

"How splendid," she said, "and that is why everyone reads your books."

"No, the changes and alterations of these latter years are so great that the past throws hardly any light on the present, the men and the qualities which once stood us in such stead are placed on one side now."

"Yes, isn't it a shame," said Laura.

"Inevitable, the world is face to face with new problems."

"But the fidelity and courage they showed! Their descendants ought to have the highest place amongst us now."

"The country has need of other qualities than those of the watch-dog order," said Lake, "the security of our social order is entrusted to the fidelity of the men we need no longer as soldiers, and with this humble and honourable place they are justly content: a more intellectual and versatile character is required for public affairs. Take young Wall for instance, this opportunity of taking out a band of colonists is about the only opportunity that could come to him of emerging from absolute obscurity. He has no aptitude for political life. He said to me the other day that the people never moved except for fear; whenever they seemed to have acted spontaneously it was, he said, because there were certain active movers amongst them who understood how to make it more dangerous for a man to keep still than to move with them. He can't obtain political prestige by sentiments like that."

"But," said Laura, "his being at the head has made many willing to go that awful distance."

"Yes, that's true, the masses have a certain confidence in these old-time names. And in days gone by the aristocracy of wealth strengthened themselves not a little by alliances with this class. But

these days are over, a girl now would hardly find that kind of man with his limited opportunities congenial. Such a marriage would mean her absolutely burying herself."

This was too much for Laura.

She felt her colour mounting and changed the topic. She had lately heard a number of controversial sermons which had deeply impressed her, pointing out the errors of the older and parent church from which the reformed church sprang.

"Mr. Lake," she said, "why do the Orbians still believe their false doctrines?" He looked at her shrewdly.

"Every Orbian young lady has heard the errors of your church exposed, just as effectively as you have heard those of hers."

"But," said Laura, "people agree about every discovery after a time."

"Discovery!" said Lake. "You ought to call the origin of our religion a revelation." Laura, taking advantage of the indulgence with which he treated her remarks, said:

"It was a discovery just as much as a revelation, for if it had all happened in Scythia, no one would have known about it."

"Yes," said Lake, "no doubt there was an element of discovery, but you cannot account for the rise of our institutions as you would for the discovery made by any individual. Our institutions rise by a different and more wonderful process."

"I see now," said Laura, "why papa says you praise the individual and glorify the institution."

Lake started visibly perturbed. "Are you sure your father said that?"

"He said something about individuals and institutions," said Laura.

"I have been accused of treating individuals with severity, of cutting them up, never of praising them."

"But wouldn't you rather praise than cut up?"

"No, Miss Cartwright." Lake was moved by the blow Laura had unwittingly administered, for his reputation for sarcasm was what he really most treasured. He spoke without reserve, giving this young girl his most intimate convictions.

"Long ago Providence, in its inscrutable wisdom, using, I would not deny, human credulity as part of its means, founded the institution of the church – the Orbian church. From it sprang our church. We



rightly consider those miraculous occurrences which accompanied the founding of these institutions to be strictly confined to the past. The Orbians think they happen to-day and, moreover, they still have a hidden aspiration to usurp the functions of government. They do not give reason its properly limited province, and they conflict with the institution of the State. But it is only in our institutions that we are great. What is a man by himself? No, Miss Cartwright, the part of an individual is to contribute to the whole, by belief to form a part of the church, by obedience to law to be a worthy member of the State, and by the exercise of his faculties along sound and accredited lines to perform his little part in the progress of science. A man must first raise himself to the level of our present condition before he can help us on, and the only way to raise himself to our level is to become an efficient instrument in the church, the government, or the academy of science.

"The greatest danger of our time lies in those crude individuals who refuse to believe, thereby destroying the foundations of the church, or who start off on some wild reform of the State or science. All they do is to exhibit savage instincts incompatible with the very existence of society."

"But why do we let such people go about," said Laura.

"Unfortunately the church did not recognise the necessity for a certain amount of rationalism once and persecuted people who were found afterwards to be right. So now we are chary about repressing opinion. But these unbelievers and innovators are men of crude knowledge or crude feeling, who are a source of terrible harm to the masses."

He finished, and Laura felt that wisdom like his was the only resource against a background of dark perils.

Turning away for a moment from that scene of flowers and fruit and gaily talking men and women, a look cast far back in the past reveals the solitary life of one on whom yet somehow they all seem to depend. For in that land of Unæa there lived one who, from no philosophy, but from an inner and intimate conviction, told his fellows of a soul that dwelt in them – a home to which it went, and an eternal love behind the labour of their little day. So firm and strong was his authority, that for ages the Unæns believed in a real heaven beyond their world. All the forces of union awoke in them, and the rational and immaculate courage was born to meet their Scythian foes. But scientific exploration and the widening scope of outlook on their world brought no information of this beyond. The faint-hearted teachers of the faith turned from the study of facts, gaining their inspiration only from the past, leaving the rational

conquest of the world to men who placed the whole source of knowledge in sense. The one common point of agreement in all the speculations of these latter consisted in a determination to account for everything in terms of what they knew, in terms of their ideas, in terms of the limited thin range of their flat space events and scenes.

Lake's opinions, like those of the majority of the cultured inhabitants of Astria, indicated a somewhat sombre state of mind.

In the background of their thoughts were the old religious affirmations. But also in the background of their thoughts was the scientific picture of the Universe – a vast extent of space in which on different worlds life arose, civilizations arose, flourished and perished, leaving nothing but dark orbs revolving round extinct suns.

The old days when all Unæa was banded together in one great effort were gone, apparently never to return. They trusted to the interaction of environment and individual for the evolution of their social organism, and at the date of which we treat these blind forces of society seemed to bring about inevitably an increasing distinction of classes, with prodigal luxury on the one hand, economic slavery on the other.

Their life was active in the prosecution of their individual ambitions and aims, but the old dogmatic views afforded no guidance for their collective action, and save in the slow course of the operation of the principle of the survival of the fittest, with all its painful struggles, they had no scientific clue to the meaning of their existence.

The inspiring and brightest aspect of Unæan life was the ardour and innate faith with which the coming generation flung itself into the battle of life. There there was no flagging, no weariness or discouragement, but youth and energy perpetually renewed.

The time to change places and vis-à-vis had come. Owing to the difficulties of service, Unæa banquets were given in halls of considerable length. And in this splendid specimen of Persepolis architecture of Cartwright's, the guests first sat down at the inner end. When the first course was finished they moved, changing their partners, to a second course prepared for them in the middle of the hall. The final course was laid near the entrance, and thence they strolled out into the gardens conversing in a more desultory fashion and with more frequent changes.

Laura's next vis-à-vis was a young banker, who was always full of news about their mutual acquaintances. He began by saying:

"I've been pitying you, Miss Cartwright, it's bad enough to read Lake's Review, but you can always put that down, while with the man himself you've no escape."

"I don't believe he has ever talked to you, or you wouldn't say that," said Laura.

"Quite right, he never wasted his words on me; you can put me down, I see."

"I think you need a great deal of putting down, Mr. Field, and I'll do all I can," said Laura. And so they chatted and laughed in the old way, he never remembering to have seen her so animated before, and she determined to make him feel, when she went away from them all (if she went away), that the loss was perfectly crushing.

Mrs. Castle had the pleasure of Mr. Cartwright's society during this second course, and carefully led the conversation to a topic she very much wished to hear him discuss.

She might have spared herself the trouble of her transitions however, for Cartwright was, unlike himself, moody and abstracted. He woke up to vivacity, however, when she mentioned that the Orbian Society of Friends of the Poor had sold a large tract of land. The cause of the

continued lowering of value of real estate in a time of prosperity had been accepted by Cartwright as a kind of providential accessory to his aim of removing Wall to a place where his activities would have a beneficial field of operation, and he had not enquired closely into the causes of the fall in values. It crossed his mind suddenly that the Orbians, too, might have some knowledge of impending events, and were preparing for the catastrophe. Amongst them were to be found astronomers equal to any of those in the service of the State, and what the astronomers of the State had found out they too might have discovered. He could not understand, however, why they should part with the solid fabric of the earth – the thing least likely to be disturbed, and dismissed the suggestion which came to him for future meditation.

"It is very disturbing," said Mrs. Castle, "these sudden changes of value make one feel as if one might be plunged into poverty any moment."

"Yes," said Cartwright sympathetically, "they are a great trial."

"And then the rise in mining property. If I could only tell whether to sell a few shares I have in a coal mine or not."

"Who can tell," answered Cartwright. "There are so many conditions to be considered. If new fields are opened the prices will fall; but if the present cold winters continue, they may remain high. It's a mere lottery."

"Surely you know the report the Socialists have spread?" said Mrs. Castle.

"No. What is it?"

"They say that you only raise the price of coal to recoup the expense of the Colony, and when you have made the people pay for it, prices will go down again to normal." Cartwright frowned.

"It is like the demagogues," he said. "I pity the people – at the mercy of empty talkers, who, if they have the power, lead the nation into every kind of folly; and if they have not, sow suspicion and distrust. The rise in prices is not in the least connected with the Colony, or its expenses; it has no connection with it, however remote."

Mrs. Castle smiled at him sympathetically, and if she had put her thought in words would have said: "You dear flat, why wouldn't you tell me what I wanted to know without forcing me to irritate it out of

you?" For now, she felt quite sure of the wisdom of speculating on the rise in value of coal lands.

Meanwhile Sylvester Barr was sitting with Agatha.

"May I claim you for my companion in the fête of flowers?" he asked.

"I've promised already," she replied.

"Then the unexpressed pledge of last year, when I rowed you across, counts for nothing?" he asked.

"What is an unexpressed pledge?" she asked.

"In this case it's an unfulfilled expectation," he answered.

"Mr. Forest was talking to me so interestingly, that I couldn't help when he promised to tell me more on the lake."

"Well, won't you let me try to persuade you to change your mind?"

"Yes," she said. "Mr. Forest would much rather go with Laura, but she has invited Harold Wall – who's going out with the Colony, you



know – so she must devote herself to him; and so Mr. Forest and I thought we would improve our minds."

"I've heard, Miss Harcourt, that you have become quite serious. I suppose Forest was talking science to you."

"Yes."

"I did not know that Forest was scientific."

"I don't know that he is either, but he is a wonderful reasoner."

"And so I have to reason you out of your love of reasoning?"

"Yes."

"It isn't fair – one of your reasoning friends could easily make you think poetry was horrible, while I am a poor hand at an argument."

"How could my reasoning friends make me think poetry was horrible?" asked Agatha.

"By writing a poem, of course; now you'd much better let me leave science alone and tell you how nice other things are."

"But I don't want to do anything else except listen to science," said Agatha.

"Will the history of science do?" he asked.

"That will do."

"Well once, long ago, there was nothing on the earth but flowers, they bloomed beautiful and gay from East to West, and having all things to themselves, the history of the world was the history of them."

"Yes," said Agatha, " it couldn't be anything else – what are you looking at so earnestly?"

"I can see Mr. Cartwright's face in the mirror," he replied.

"Doesn't he look well?"

"Yes, and happy, trying horribly hard to look happy."

"He's trying to be polite to someone he can't bear, go on with your history."

"So the flowers grew in the sunshine and in the night, and most were careless and happy. But some began to think."

"How does a flower think? they haven't got anything to think with."

"Yes they have, they think with their roots, and when they think very hard their roots grow into little round swellings, those are the brains of flowers. And the more they thought the more they wanted to think till their brains became very big and they got tubers and bulbs. It seemed to be no good because, of course, they couldn't do anything, but still they had wonderful thoughts, and thought on and on."

"How funny, but was there really any good?"

"Of course there was, nothing, in nature is in vain. The winters became colder and colder, like they have been doing recently, and the poor flowers were all killed, except those that had their tubers and brains. They stopped underground, and lived ever so long, till the weather got fine again. Then they grew up, and that is why the oldest flowers, those from which all the others come, have bulbs and tubers. And now you see the reason of science, it's only to make our brains grow. They are our tubers, and when we all take to caves and caverns, only scientists with big brains . . . ."

"Don't go on," said Agatha, " I'll make any promises you like if you'll only stop."

Sylvester Barr was still looking in the mirror, catching glimpses of Cartwright's face, from which the singular expression he had noticed had gone. But though the expression had gone, the effect of it remained, and it was no doubt because of some subtle communication of influence that his history took the form it had. One man could not carry the burden of the knowledge of the approaching end of all that happy world without striking somewhere a resonant chord.

It was with a sense of perilous pleasure that Laura found herself sitting next to a real unbeliever for the final course of the banquet. Flower was a young and distinguished professor of Biology. Laura found no way of leaving the discussion of theatres, and sports, and people, till course after course went by, at last she boldly said: "Mr. Flower, do you really believe that I came from a monkey?"

"That isn't fair, Miss Cartwright, someone has been telling you tales about me, and making fun of my opinions, while, if I defend them, you will laugh at me still more afterwards."

"I won't laugh at you now," she said. " I can't tell how foolish I may be afterwards."

"Then I'll live in the present."

"Yes, do."

"It is quite true that I, like other scientific men of the day, have given up all the explanations that have been handed down from the past. But that is because we wanted to be able to really believe in something, for we found old theories, to say the least, full of self-contradictions, and looking at nature we found simply an inexhaustible fulness of things to believe in. Everything there is gives you something to believe in, namely itself, if you examine it carefully. It does not say much at first about other things, but gradually a light breaks in and we have found that there is a universal process in nature from the less complex to the more complex. At first there was only a nebulous dust suspended in the firmament, then star clusters were found by condensation, and planets moving round in their orbits. Then on this planet of ours forms of life arose, and from the first beginnings have evolved all we see. You know that every animal or vegetable is subject to slight variation. Now each animal or vegetable in the natural course of things is capable of filling the whole earth with its descendants.

From this innumerable progeny some are selected, namely, those that are best fitted to survive. Hence any feature of advantage is preserved, and gradually all those adaptations we so wonder at come into being."

"What a long time it must have taken!" said Laura.

"Ages and ages that you can hardly begin to conceive, but what is time in evolution? That is the mighty force, the wonderful process which brings every form of life into being. We need none of the old suppositions of types or tendencies, we see the whole world evolving itself inexorably, necessarily, into new forms of ever greater and greater complexity."

"But," said Laura, "you might argue in the same way about the household things we have, once we used very simple things, now they are quite complicated, but we know there was thought and design in making all the changes."

"Oh, yes," said he, "that is part of the same process. An organism in a shallow pool of the sea is in danger of being dried up when the tide recedes. Those that have a tendency to creep out into the deeper pools survive, while those that have not this tendency die. In such actions which tend to preserve a species is the origin of a directive

power which, amplified in the long ages, is our conscious thought; all is a product of this mighty power."

"Then are we the highest things there are?"

"The very highest. This mighty process has produced you and me – you the very apex and flower of it all, and I who can open your eyes to it. This knowledge brings with it a great responsibility. We who trace the rise of one form of life from another, and the law of progress, have gained the insight from the only source possible that is capable of directing the course of our country. I know I seem presumptuous, Miss Cartwright, Laura, but you with your intelligence were born to be more than a mere onlooker or fêted and courted grand lady, in the inspiration of this great thought I claim you for it – we together, what could we not do!"

"But," said Laura hastily, a little alarmed, " I don't believe in your evolution a bit. It seems to me like this, as if there was a stone at the bottom of a hill, and afterwards you see it at the top of the hill, you feel obliged to explain how it got there, and don't see any way, so you make up a kind of principle by which it got there of itself."

"But we know that there were once only the simpler forms of life on this earth and now we see most complex forms."

"Yes," said Laura, "that's just it. Because you don't see how the change came about you make up an explanation of how it came about of itself. If you really saw how it took place your account would be perfectly useless."

"Well, how did it come about?"

"By planning and trying and thinking, as we make things," said Laura.

"Oh this is animism, it is fetichism, it is deplorable," said the professor.

"What nice words," said Laura.

"But – "

"If I like them it would be deplorable of you to try to make me think as I don't like to."

"But I should like to make you like to think differently."

"Well, you must try," said Laura, "I'm so glad you told me about your opinion, for I think you are a very safe kind of unbeliever. You don't want to turn papa out, and upset the government, do you?"



"No," said Flower, "certainly not. You must not confuse me with the ignorant rationalists."

"No, I won't ever again," said Laura, "and you have a powerful way of thinking, and if I don't like it, it is my misfortune you know, not my fault."

It was time to pass out into the garden and, fortunately, Agatha was close at hand walking with an Orbian priest. Laura told her professor that her cousin loved talking about scientific things, and introduced him, turning herself to Father Luke.

Laura had never found anyone so quick to respond to her wish to talk about serious things as this Orbian priest.

In the plutocratic society of Unæa, absorbed in its material interests, girls were trained to have a most vivacious interest in things, to care about manners and dress, and their talk was considered the more perfect, the more butterfly-like it hovered o'er the things of the hour. But he found himself describing to this girl the life of a sister, living in a hospital with the sick and miserable always about her, yet from whom a wave of happiness always seems to radiate, whom he thought was the most perfectly happy person he knew.

"That," she answered, "is because there is something great and strong always near her which she knows is perfectly right, but what if there is something great and strong near one which one isn't sure is right?"

"It's hard to be happy then with a true and peaceful happiness," he answered, "but that need never happen, for to all those that believe we bring the consciousness of something great and strong, nearer than father or mother or husband or wife, that is perfectly holy."

"Yes," she replied, "I have heard so, but we are told that it is best for us to be left in the dark sometimes because we learn to use our own judgment."

"If you will let me say so you have a wrong idea of judgment. Judgment is only how to carry things out, God does not leave the world in darkness, there is always His will plainly revealed and those He has sent to declare it."

"Yes, I know you say so," she answered, "but perhaps you are mistaken sometimes. You say that the rule ought to belong to the Orbian and we ought to be all His subjects."

"Yes," he replied, smiling.

"But that is contrary to law. You cannot say rebellion is right."

"What I said was very different, and it will come to pass," he answered. "We do not say overthrow your rulers, but when your rulers and you do not know what to do, you will come to us. They will find where the wisdom is ultimately, for it is not possible to suppose, is it, that God has not given light sufficient for our path? All we have to do is to accept it."

"But believing as you do," said Laura, "I should try hard to make people believe; they turn just in the opposite way now."

"Not so much as you would think," said he, "there is a constant tendency to turn to the holy father when men are puzzled and confused. Even to-day your father asked me if our influence could not be used to turn men's minds to this Colony – I said 'No.' Humanly speaking it seems right, but the holy father has pronounced the word of God against it."

"But I heard," she said, "that Harold Wall had a large following who were ready to go."

"Yes," he answered, "they go and we remain."

Was there a touch of sadness in his tone? She felt responsive to a voice that sounded full of sympathy for a troubled heart, welcome in that babel of gaily talking men and women. He answered her look by saying:

"My daughter, let your happiness consist in following the right, for remember you are but as a flower in the field, or a piece that the designer places in his work, yours it is but to be, and leave it for an all wise hand to place you – be it on this earth, or be it beyond in the place prepared for you."

He spoke with tender earnestness, and Laura felt that he looked upon a world hidden from her sight.

"Laura," said Agatha, as they sat together in her bedroom, "whatever did Father Luke say to you this evening, you aren't going to be converted, are you?"

"He was saying that no one need ever be uncertain of what was right. What he said was beautiful."

"I'll tell you what I think about it, Laura. You know there are some people who think you can get well when you are sick, simply by faith. We don't believe that, and it is easy to see that the same

principle could make us try by faith to make a house grow up simply by believing it was there, or try to get anything else we wanted without taking trouble."

"Yes," said Laura, "it would be very convenient to be able to get things simply by believing we have them, but we can't, we have to take a whole lot of trouble."

"A great deal of trouble," said Agatha, "and the way to get them is often very indirect."

"I wouldn't mind how indirect it was if it led right at last," said Laura.

"No, being your father's daughter, I think you would not."

"The worst of papa is that you only know what he wants when he has got it."

"You mean you can't help him?"

"You can neither hinder him or help him," said Laura diplomatically.

"That is because you are so passive, Laura, you let people do what they like with you, if you had some motion of your own, you wouldn't be so much clay in your father's hands."

"I'm not clay."

"Yes, you are very pretty clay, you will be engaged and married before you have had any life of your own."

"I'm not going to be," said Laura nervously.

"Well, the only way to stop it is to do something; take me, for instance, they were going to marry me to someone I didn't like, so I took up science, and by and by they'll be glad if I marry at all."

"I always thought you must have some reason for taking up science," said Laura incautiously.

"That shows how little you know about it," said Agatha, "science is the most glorious pursuit in the world. I didn't know anything about it till – till some-one told me. We want to know and the only way is to begin at the beginning. We can't choose what to know and science is beginning by knowing what we can. He said that we are like a giant, bound, who can only just begin to move, we are feeling now

just the simplest real things about us, some day we shall come through that to know ourselves, and the certainty of all that people have imagined so much about. But it takes hard work."

"I wish you would let me come with you to learn science," said Laura.

"I think you had much better take up art," was Agatha's tardy response.

## **Chapter 5: The Fete of Flowers**

During the past weeks Laura had seen much more of her father than previously. She had tried to establish some equality of spirit with him and felt that he treated her less as a child than before.

On the morning after her conversation with Agatha, she found him in a very bad humour. "It's a thankless task that I have," he said. "I have to cajole people into doing what is for their own advantage, and then they turn round and spoil my plans out of pure wantonness. Out of pure opposition the Orbiens issue a disparaging notice of the whole enterprise of the Colony. It's pure bigotry."

"But, Papa, they must have some reason, can't you think of any?"

"Communication is likely to be pretty difficult; probably next winter the ocean is likely to freeze over, but they can't possibly know that."

"They know a great deal more than you think," said Laura.

"What do you mean, Laura?" said her father in a tone which startled her, "tell me quickly everything you know."

"I don't know anything, Papa."



"Then why did you say that they knew more than I thought they did?"

"I don't know."

"Laura, I insist on your telling me."

"Indeed I can't, Papa. Father Luke told me that the Orbians knew the truth and that everyone would come to them for guidance."

Cartwright looked at her searchingly.

"You are not keeping anything from me, are you, Laura?"

"Why do you send Harold away?" said she, "if there are plenty of opportunities you could give him here."

"Harold Wall is not the kind of man one can offer favours to," said Cartwright, "this is the very opening for him, and it will lead to a long and distinguished career, I hope. He has not said anything to you which would lead you to look on him as more than a friend, has he?"

"No, Papa."

"You must absolutely put away any thoughts of that kind. Harold is too sensible a man to cherish them. You are not the girl to go moping for a man who has put you out of his mind. And I tell you frankly, however much that young man cared for you, his pride would be an insuperable obstacle. The only way in which a Wall would ask me for my daughter, would be as an equal. You may be pretty sure you have seen and heard the last of him, unless some miracle happens. It's just as if you lived in another world."

"I know that, Papa."

"A great many lives go to the making of a state, and many fancies of boy and girl to the making of a life. Remember, you are my daughter, and I am ready to do anything possible for you."

"Yes, Papa," said Laura, "I know that, and I was going to ask you something."

"Well!"

"Papa! I want something to fill my life. I want to study science."

"What, this pretty head bother itself that way! You haven't the capacity, Laura."

"Do you think you have all the brains of the family, Papa. Isn't there a little left over for me?"

"Very well," said Cartwright after a little reflection, "you shall go to my brother. You are very late in beginning, but he will see what can be made of you for the sake of the family."

Hugh Farmer, Cartwright's half-brother, lived in a remote and dreary region of Scythia, and was always spoken of in the family as a man of wondrous learning with no redeeming human feature. However, Laura had made her bed, and felt that she must lie on it.

But when her father proposed that she should start before the end of the week, despite herself, tears came.

"Why, what is it, Laura," asked her father, "crying because you have got what you wanted?"

"Oh, Father," she said, "I – can't you let me stop for the fête of flowers?"

Cartwright smiled. There was no very great difficulty to be apprehended in dealing with a child who thought so much of a pleasure party.

Cartwright, when his children were little, had carried out his notion of a return to nature in their education. For a great part of the year they lived at his country place, on the shore of the Alban Lake, and there they discovered a pastime, which arranged and ordered under his systematic care, had enchanted the world of fashion. Not to have been to one of the Cartwright's flower fêtes, was to have missed the fairest sight Unæa could show.

For from that thin line of earth, so tenuous and slender, sprang with a lavishment no words can portray, flowers in profusion, enchantment, wonder. It but needed to stay the feet of passers-by, to let the generous soil alone, to enable it to become a magnificent purveyor of beauty. Thus from his children's early walks and his own recognition of how not to do, had sprung this festival, the acme of fashionable delights.

It would have grieved Laura desperately if she had not seen Harold again, and at this fête of flowers, where she could make him the guest of honour, she would have all the opportunity she longed for. She wanted to make amends for her trivial heartless way of dissuading him from his enterprise. Really she thought it splendid of him. It appealed to her this going forth to strike out a new land from the wastes of Septentria. And she wanted to tell him that there was no danger of her forgetting him. How could she do this better than in

the scenes of her childhood where every step meant love and trust. For Laura had had the happiest childhood, and in this fête of flowers she would lead him, step by step, the old frequented way – she knew that she could take him right into the home of love and trust her mother made for her in days long gone, and perhaps she would find the chance to say, "Harold, if in your great work you are ever weary or lonely or sad, remember there is one far away that thinks of nothing but you."

Early on Wednesday all Laura's friends – young men and girls, and not a few older folk who feared not fatigue – left the city for an arduous day's journey. Conveyances in Astria, unless very slow and ponderous, do not afford the easy travelling that our vehicles do; and thus, late at night, tired, ready for supper and sleep, the party reached the pavilion prepared for them about a mile from the shore of the lake, perched high upon the Alban hills.

Next morning, before daylight, the summons for rising sounded, and as the sun began to gild the clouds, the young men and maidens began their walk over ground no Astrian foot had trodden for days before. And then before their eyes was a sea of flowers.

There were great morning glories, poppies and asters, tall white orchids nodding stately, and many and many a blossom we know not

of. There was no shape exuberant fancy could demand but what was there, with scent and dewdrops laden, lifting itself in the palpable thick splendour of the coming day. Great handfuls the girls gathered. They, like flowers plucked by some loving hand and given motion and smiles and song, plucked in turn their sisters to share their adventure and their joy. Upon the sandy margin of the lake were little boats and, when the sun was high, in each a flower-courted queen reclined, and her subject, wielding his long oar, swirled the waters and rowed her out upon the placid bosom of the inland sea.

That voyage wafted Harold farther and farther in the land of enchantment till he felt that if, on the solitary desert of the Antipodal shore, he passed his life alone, were life well spent in all the blessed memory of that bright hour's converse on the lake, where shone the lustre of the deep-hued flowers and that great white lily, supremely white, those clustering leaves of green and pure white petals on Laura's breast.

And as they floated on they talked as they had never talked before, the wind wafting them, the clear sky above them, they sailed away to a new land. She was no longer the prize, the adoration, the remote divinity, the distant being to win, but she was the dear close companion, the sharer of his thoughts; inexpressibly insensibly all day long she grew closer, more real to him, and doubt, anxiety, and

fear dropped away from his image of her – he learned that she was real and strong, and if they drifted away from one another afterwards, it would be through no trifling thing like an ocean's breadth or long years' delay. Laura seated herself in his heart as a divinity beyond the reach of accident, not to be gained by opportunity, nor lost by circumstance, but as if growing beside him like an other self, not to be affected by other people or moved from him by any-thing. And yet no words were said of what they felt for one another. Laura simply let drop her tantalizing moods, told him of the old dear times, and in a mute surprise it grew upon him that his work, the great thing he was going to do, was what her life hung round, her thoughts turned to.

The last of the boats to arrive at the opposite shore contained Agatha and Forest, deep in conversation and giving no heed to the trivial interruptions by which the others tried to disturb them. As far as to be gathered, the topic on which they had arrived was the unexampled opportunities of recently married women for studying the variation of the species under domestication.

Someone passed a stone from the shore to typify the weighty nature of the conversation, and, as is often the case, the joke was carried on with more enthusiasm than discretion. Before they were aware of

what was done the waves began to leap over Forest's craft. Agatha uttered a shriek of alarm.

"Don't be disturbed," said Forest, and leaning back over the stern, lifted the prow clear by his weight. "Jump," he said.

"Jump, Agatha, before you sink," cried the merry voices from the shore.

"What will become of you, Edward?" said she, standing uncertain.

"Oh, never mind me," said Forest. "Often, when I go out rowing alone, I have to swim to shore; the boat fills with such weighty thoughts."

"You ought to have told me before you asked me to come," said Agatha indignantly, and leaped to safety.

But Forest had placed his oar under the stern of the endangered boat, and so was able to escape submersion and join the others with undisturbed gravity.

On shore they danced, walked, and talked. Then in the evening they all returned in the great ferry boat, singing their way in the blue-



black night, and, sleeping at the pavilion, returned to the city after their day of simple and natural pleasure. So ended the flower fête.

## Chapter 6: On Lone Mountain

Shortly after the fete of flowers, Laura started to pay a long visit to her uncle in Scythia. But before recounting the events which happened at Lone Mountain, a few words as to the character and life of Hugh Farmer will not be out of place. He was the only man in Unæa who believed in the third dimension. The occurrences by which Farmer was led to form his belief form an episode which is one of the most curious that can be conceived as happening in Flatland or any region of space. In Unæa, as with us, it was quite customary to represent a number by a line, and the square of a number by a square. If the number two was represented by a line, then 4, the square of that number, was represented by the square on that line. It was also quite obvious to the Unæans that the cube of two, or 8, could be represented by a figure with one more dimension than a square. They had the formal notion of a cube. But to conceive that such a figure actually existed, contradicted every principle of their science. For science involves a basis of observation – something given by the senses on which thought acts. On the other hand, to conceive a space of three dimensions meant giving thought a wrong part to play, a wrong function to perform. Thought would not give existence, it could only operate about existing things. The Unæan thinkers would as soon believe in chimeras or dragons as in

three dimensional space. For those notions, just as three dimensional space, were deduced from thought, not founded on evidence of the senses. Farmer shared to the full this ardour of conviction of the supremacy of sense in giving materials for thought to work on. But in his day there was a sect who held the doctrine that the soul was separate and distinct from the body. They claimed that it was possible to hold communion with the spirits of the dead, and they asserted that these ghostly beings could make themselves seen and felt. Now anything that could be seen and felt Farmer held to be a legitimate object of scientific investigation, so he took up the study of these spiritualistic phenomena. He fell a victim to jugglery. Tricks were played on him, and curious and inexplicable phenomena were produced in his presence. And it so happened, by a curious coincidence, that the marvellous occurrences which were palmed off on him were of a kind which could physically be produced if there were a third dimension. The tricks were wonderful enough in his space. But in three dimensional space they would not be wonderful at all. For instance, in Flatland a box is a four-sided enclosure like a hollow square. Now Farmer saw objects outside such a four-sided enclosure, and afterwards inside it, without the sides being disturbed. Of course as a three dimensional feat there would be no difficulty in transferring an object from the outside of a square to the inside. It would simply consist in taking it up and putting it down in a different place. Such occurrences and others Farmer witnessed. He

believed they really happened. They made him believe in a three dimensional space. He had that impact of the senses which was the only way a scientific and thoughtful Unæan could be got to believe anything. And this impact of the senses, this seeing and touching in the curious and roundabout way I have described made him believe in the third dimension. When the first step was taken, of course, and when he mentally habituated himself and became familiar with three dimensional shapes, they afforded no more difficulty. They were evidently natural, and he saw it was absurd to limit existence to a plane. But his enthusiasm over his new conceptions led him into quarrels and disagreements with his contemporaries. He found it expedient to retire to a little property he owned in Scythia. There he shook off the load of other people's disapproval, and in solitary blessedness lived himself into the knowledge of three dimensions.

Nothing could have equalled Hugh Farmer's surprise and annoyance when his beautiful niece appeared and announced her intention of studying science with him. He told her he had absolutely no time and retreated into his inmost den. But she busied herself in his rooms, putting flowers on his shelves, and when hunger drove him out, he found it not so disagreeable to sit down opposite a fresh young face.

As is often the case with people who really know something, he was the last kind of a man for a young person to go to in search of information. He began to think aloud.

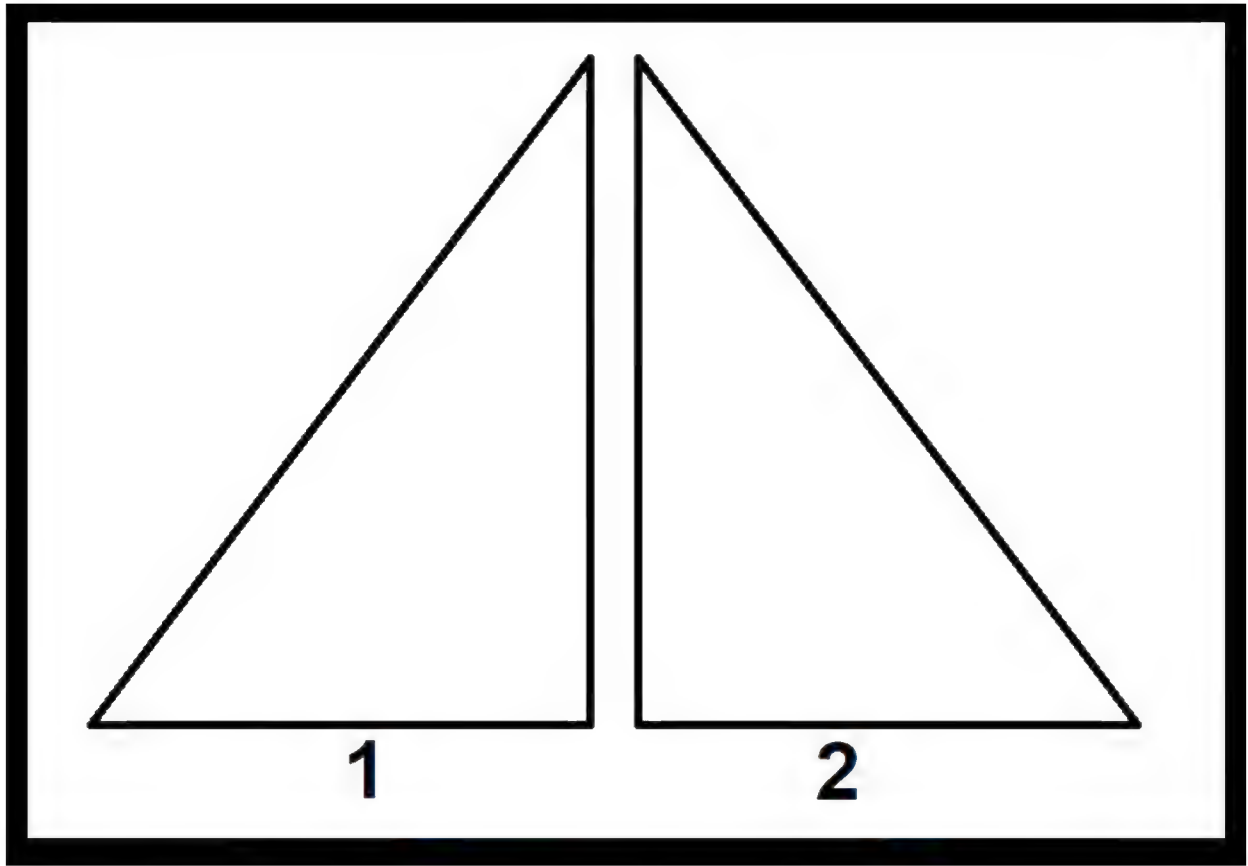
"Have you never thought it strange," he said, "that there should be two shapes, each of which is exactly alike in its disposition of parts, but such that we can't turn one into another."

"There are not any shapes like that," she said.

"Yes there are," and he showed her two triangles and pointed out that each had the same angles and the same lengths of sides, but one couldn't turn into the other, however much she moved them about.

Laura looked at them, and they reminded her of the little make-believe figures, the dolls she played with as a child, for those dolls were cut out in the form of triangles, and the triangle turned one way was always used for the boy doll, and the triangle turned the other way for the girl doll.

(It is difficult to follow the old man's argument, but if one cuts out a couple of triangles like these (1 and 2), it is easy to see that keeping them against the surface of the paper they cannot be made to coincide.)



[ID: Two right triangles with their vertical sides lined up with a small gap between them, labeled 1 and 2. End ID.]

"They are like the little dolls I used to make," she said, "one is like the boy doll and the other is like the girl doll."

"Yes," he said, "and could you ever turn one into the other?"

"No," she said.

"Why not?"

"Why should you want to?"

He groaned. "I didn't say I did want to, but if two things are exactly alike they ought to be able to be put in the same space."

"Of course they ought," she said, trying to please him.

"Well," he said, "if you think of a third dimension you could turn one into the other."

"Oh, I have heard of the third dimension," she said.

"Yes, what do you know about it?"

"It is where our souls go, our spirits, I mean; of course there you could turn one into the other. That's what they mean by saying that

there is no difference between men and women in the land above – it's just the same for dolls as for us."

"I didn't know your father had an idiot for a daughter," said the old man, and went off to his den.

Laura rather liked it. It was so different from the way she was generally spoken to. In fact, her uncle impressed her tremendously. And that he didn't like her, nerved her to do battle to win him. His books were all around. She took one to her bedroom, and failing to make any sense of the signs began to copy them out, and learn how to make curious marks of that kind. In the stillness of the night she frequently heard a tramp – up and down, up and down – and when she fell asleep it had not ceased – restless, nervous steps, as of some caged and suffering creature. She looked at her uncle nervously the next morning. He did not look any different, but she was sure he had hardly slept.

"Uncle," she said, "what is it makes you so unhappy?"

"Why do you think I am unhappy?"

"I know you are."



"I am an old man and must die soon."

"But all old men are not unhappy."

"Ah, but they leave the world young and fresh. Even before I go a wave of cold will strike us all, and lakes and seas will freeze. No green thing will blossom, only a few in deep caves, or, with soon-to-be-extinguished fires, will struggle on in a miserable existence that will be the end of the greatness of our earth."

"No, Uncle," she said, "you exaggerate. Papa told me something of this. He said the winters would be very bad; but I am sure it will not be so bad as you think."

"Child, your father mercifully hid his knowledge from you."

"Oh, Uncle, is that why he looked so worn and sad?"

"Yes. To bear a hopeless secret like that is enough to make him worn and sad. Only its absolute certainty could force him to admit it. He sent me the work he had done and I found that his calculators had taken the favourable supposition in every doubtful case. I do not blame them. The alternative is too terrible. On the most favourable supposition after the next meeting with that great planet, Ardaea, our

earth will swing into a new orbit – we shall go far out into cold space till the earth is frozen deep, then we shall rush back so close to the sun that every day the surface of the earth will be seething hot. Perhaps some of us may maintain bare existence in deep caverns and hollows."

"If you are sure of this, Uncle, you ought to tell it that we may all prepare."

"Prepare for what?"

"Why, dear Uncle, our bodies are not all. If you or I die we know that our souls survive, and are judged by all the good and ill in our lives. You ought to tell everyone."

"And let them destroy all law and order in one short carousal? No, Laura, you do not know the world. There is more common sense in the common people than in all your bigoted idealists. We are here for a work and not for a theatrical play to manifest good qualities, and if men know that this work is to come to an end the fallacies of their preachers won't have any effect on them."

"They are not fallacies, Uncle."

"They are worse, Laura. They are interested deceptions. It grinds my heart out, child, to hear those glib preachers showing the way so confidently on evidence which no ordinary man of business would trust for the simplest speculation. If we have learned any one thing more certainly than any other, it is that we can only know about the proximate. We can take and take again, one little step forward. But all they do is to start from the ultimate. They know, forsooth, what is, and from that they deduce what must be."

"But you believe in God, Uncle?"

"I don't know what they mean by God. All theology is a vast fiction beginning from the wrong end, which prevents our finding out that proximate higher which we might have a chance of knowing. The fools," he muttered, "with the tools to their hands and with their eyes gazing to heaven – refusing to use them. Refusing till too late."

Thrilled to the heart with the fire of his gaze, Laura struggled with the enigma of his emotion. It was not helpless mournfulness that weighed him down – not despair; something else than the doom of the world filled his mind, something he did not want to tell her. All at once she said, guessing his secret thought,

"Uncle, you could save the world!"

"What has your father told you?"

"Nothing. But I know you would not feel as you do if you could not."

"But no one will listen to me."

"Uncle, what is the good of hating anyone? They are all really in earnest. It is only because they don't understand you. Go and talk to the learned men who find out about the earth and the stars."

"You do not understand, Laura. The dogmatism of scientific men is stronger than the dogmatism of religion, because they can prove they are right. They can appeal to the evidence of their senses.

"I, too, was like them, and believed that I, my power of thinking, and every faculty I had, was produced by the things around me; that the processes I knew of would make me if only I sufficiently understood them. I laughed the idea of a spiritual existence apart from matter to scorn. And as to a third dimension, it seemed to me ridiculous to make an assumption for which we had no evidence. But I gained the acquaintance of a man of perfect loyalty and veracity, who was gifted with singular powers. He claimed to have communication with the spirit world, he showed me many things that people account

miraculous. What I noticed was that these wonders were things which it would be easy for three dimensional beings to do. Scientific men called him an impostor and cheat. But I knew him too well to join in the chorus. He made me believe in the third dimension by the only evidence I would accept – the evidence of my senses. And, Laura, I am proud to say I stood by my benefactor. It was the only act I can account worthy of a man in my whole life. It's a little thing you would say, just to declare that certain things happened to little bits of matter. But it cost me every friend I had. I could not even retain my poor and insignificant position. It is as much as anyone's professional reputation is worth to have anything to do with me. If I had an experiment as clear as day they would ascribe it to trickery. And, Laura, it is this truth that would save us all if men would only believe it."

"But," said Laura, "if you believe in spirits, the clergymen would listen to you."

"Much good that would do. I tell you, Laura, that those men are so versed in unrealities that, if anyone were to tell them of how what they talked about were possibly real, they would like to burn him alive, if they could still keep up their taste for that sort of thing. No, they have a closed system of their own; and their idea of thought is to try to make out exactly what is written in old books and find out

whether this man or another really lived when he is reported to have lived. That's the kind of stuff they give to a perishing world."

"But if they make people better?"

"Yes, yes; it's their thought I'm thinking about; what they really understand. I've tried your father. I am always trying the scientific men, but they politely return my work. I know what they think of it."

"Uncle, I know someone who would help you."

"You are very beautiful," he said, as he drew her to him, "there is someone who loves you very much."

"Why do you say that?"

"My dear, I know it."

"Uncle, I will be frank with you; somehow I feel that I can tell you. I love someone very much. He has never said anything to me, but I hope, indeed I am sure, that he loves me. I feel this way about it. There is a great fountain of love from which we all drink. Now I love many people and think about them frequently, but there is one whose being gives colour to my every thought. Everything I think or do or say in some way relates to him; and when any beautiful

thought comes to me, it turns to him. Now, Uncle, do not laugh at me. I am not investing him with supreme goodness, I simply feel as I have told you about him. And when I think of all these things and how much of his individuality has become the best part of me, I cannot help believing that he must in some way absorb something of me."

Farmer took her hand. "Thank you, my dear, for letting me see your heart. Yes, I think he must love you too. Do I know him?"

"He is Harold Wall," said Laura.

"I knew his father. After the great war he could hardly speak our language. He used a dialect which had sprung up in the long journey. To the end of his life, he was the same – rough, uncultivated, unable to adapt himself; men honoured him for the way he had hurled his men through the deserts, but did not love him. His life was used up in that effort, as mine has been in mine. Perhaps his son will understand that I, too, have ventured and succeeded, when to everyone else I am a drivelling dotard, speaking in a scarce intelligible language. I suppose," he added, "your father does not look favourably on him?"

"He has never spoken, he is too proud. If he did care for me, he would never speak."

"That is well. Laura, something tells me that the tie that binds you two is very deep and true. You must not think, as other lovers often do, only of one another; but out of the great tenderness and truth of your affection, you must turn and give yourselves – give one another – to help and save us all. Now write to him, giving him a message from me. Tell him that he can save his country."



## Chapter 7: Laura's Letter

"Dear Harold,

I am staying with my uncle. Before I left the city I saw a great deal more of my father than I used to. And I found that there was something weighing on his mind, something that he kept to himself. Once he was very angry because he thought I guessed it.

We have been living in ignorance of a terrible danger that hangs over us, over the whole world. My father knows of it, my uncle knows it. If you go to the Director of the State Observatory and tell him you come from my uncle he will not deceive you, though the danger is kept secret. It is this. The summers have been growing hotter and the winters colder, because we are attracted out of our orbit by Ardaea.

In a little while we shall be frozen to death or burned up alive. My uncle knows a way of saving us. Please come and let him tell you what it is. By himself he can do nothing, but with you to help him he can bring us to safety again.

Yours very sincerely,

Laura Cartwright."

If one of us had taken the journey Wall took in response to this letter, had passed the crowded cities, the straggling villages and solitary dwellings on our way, we should have felt a strange sense of isolation – as if our unshared knowledge was phantasmal, and all those unconscious people in the possession of the truth, not ourselves.

How could the age-long routine of business, barter, trade – the intense and urgent solicitude of every man in his own affairs – how could the absorption of each man in his own microscopic corner be interrupted! By dint of their intense pre-occupation in their own individual affairs, the race has surely won the right to have the basis on which all rests undisturbed. The firmament, the arch of sky, the mutations of the seasons, the fabric of the earth, they at least must be secure. But Wall had wrung the secret of State from the unwilling astronomer and accepted it. He believed in the interplanetary vicissitude and was prepared to consider means of averting it. There was no lack of events which he could have looked on as ominous and significant. Great storms had beaten on the shore. A tidal wave of unprecedented magnitude had caused serious damage to the ships prepared for his expedition. The frightened colonists refused to sail till the sea was settled to its usual calm. But his attitude, his readiness to believe and act upon a theory can only be explained by the history of his people. We must remember that Unæa owed her

existence to an idea – it was the idea of the circularity of the earth that saved Unæa from destruction at the hands of the Scythians and therefore the Unæans had a different attitude with regard to ideas to that which we have, for we belong to the barbarian hordes who swept off the face of the earth the people who had ideas – the Greeks and Romans. Ideas are to us of incidental assistance, but we feel that essentially we can do very well without them. The Unæans were different, they had a faculty of realising and acting according to ideas which seems strange to us. Our history is as the Astrian history would have been had the Scythians overwhelmed Unæa, and plunged the nascent star of civilization into long centuries of eclipse.

At this epoch of his life, Wall was free from those charges of unbridled and self-seeking ambition which were afterwards levelled at him. His life, if obscure, had been simple and straightforward. For so young a man, he exercised a remarkable influence over his comrades, due perhaps to his power, which showed itself so often at a crisis of coming to an unexpected but irresistibly incisive decision, sweeping the minds of all along with his own – an influence perhaps due, in some measure, to the hidden passion which lay behind all his frank comradeship, giving a touch in his intimacies of that zest for the unattainable, that reaching beyond the obvious bounds of fate which lies latent in everyone.

Some would look on him on this journey as filled with an unscrupulous ambition, preparing to strike with the subtlest instinct of success. And this no doubt is true. Strictly speaking, his course is indefensible. But there is another side. Let us look on him that last night of his journey as he hurried on.

Slowly Ardaea rose, the hymned of mortals, the divine orb, the legended cold lover of the earth, towards whom poets had ever turned lavishing their adoration. She slowly rose, strangely ardent, and burning bright, for at last that cold heart was touched: the chaste and solitary, the huntress of the skies, had turned from her lonely path and, responding, was already swerving in one moment of the giddy whirl of passion to draw her earth lover to his endless death. But innocent! Away with the fables that lend the appearance of purpose to the course of things. In the appointed revolutions of the orbs of heaven, in those great secular changes, there is but inevitable law, and in the cold rhythm of the cosmos, the warm pulse of heart, the plan of mind, and all the fabled legends of the soul of things, is but as the splash of a pebble in the ocean, signifying nothing.

Yet wherefore this throb? This life passion that he felt rising within him as he drew near his journey's end? In the suffusion wherein all his being lost itself in another's, in this was there not something as great as in all the world's inevitable course?

Thinking of her and all she meant to him, he entered on a different path, a different way to that wide contemplation of vastness, but in this intimate, most secret, and real communion he arrived at something as true and as strong as all the substantial distant phantasmagoria of earth and skies.

Did she not tell him there was hope? Himself and her in the face of this great catastrophe, were not alone. Love and trust and hope had ever been, had ever faced the vast mechanic universe. What of the age-long revolutions of the planets, had there not been age-long efforts of true men. Incalculable vast forces went to the swinging of the orbs of heaven, but also incalculable vast forces, age after age, and generation after generation, in the beating hearts of men, laboured there also, built up their edifices, prepared their powers. And in the army which had saved Unæa, which, now abandoned of its use still strangely lingered on, for all its forlornness yet capable of predominance absolute, perchance that army now by gathering all the forces of the land, gathering them from ineffective hands, might save the earth – what else than some such message could her letter mean?

Harold found himself in the presence of an old man, bowed and emaciated, but of a ponderous brow and keen gaze, and his love stood by silent. The old man asked him:

"You have questioned the astronomers?"

"Yes, they have left no doubt in my mind."

"In the greatness of our peril," said Farmer, "all that human ingenuity has devised stands for nothing. No known force can alter the orbit of our earth. The event is hopeless as far as our science goes."

"That is the opinion of those who have studied the question."

"But it is hard to set a limit to what is possible. What men think possible depends on two elements, not one. It depends on the facts and on their ideas. Now, science has been concerned in developing a certain limited range of ideas – they are a few out of the many ideas of the past – just the few which we justify by observation and experiment. But there are many more ideas than these, and I believe that our path lies more in acquiring new ideas than in the one we have trod for the past few centuries – in working out the consequences of the ideas we have.

"There is one idea which I have been trying to live into all my life, and which gives a perfectly new range of thought and physical possibilities. It is the idea of a third dimension. According to it, when

you think you are in empty space you are really not so. To prevent your moving in the third dimension there must be some physical cause, a source of resistance. This is the alongside being, a substance with which you are in contact whenever you move, which you never can become aware of because you never leave it, you are like a particle slipping along a smooth edge – the edge prevents its moving except in a line.

"Now, along this alongside being, there are all the directions of motion possible which we can point to, and by acting on this alongside substance we can hinder and change our movements. The means, and the only one by which we can escape the catastrophe, is by acting on this alongside substance to deflect the course of our world. This can be done. I will explain how."

Harold answered, "To say that there is something besides space which stretches infinitely all round us sounds to me absurd. You have a scientific theory, put it before the learned bodies, you can convince them if it is true."

Farmer made a gesture of resignation, but Laura seized his hand in her warm grasp and smiled encouragement, whispering, "He only wants to find out what you have done already."

"I have tried," said Farmer, "to convince the learned bodies. They assume that my view is mere formal analogy and will not spend the labour in habituating themselves to it, which is necessary to feel it true."

"But you can prove it is true."

"I can, but in no way they will admit. The conditions of my proof are too involved, and individual with me. They call it spiritualistic jugglery and will not attend to it for a moment. You must try to understand."

"In the first place," answered Wall, "I doubt if I should understand however long you took in explaining, and in the second place it can make no conceivable difference whether I understand or not. I am a soldier merely and obey orders. Now there are many clear-headed men who have a great deal of influence in the government, you should appeal to them."

"You mean my brother and others like him?" said Farmer. "They pay the scientific men to do their thinking for them."

"Then," said Harold, "there is only one course left. You must move the people by the churches."



"Don't trifle; the kind of people that direct them wouldn't have the slightest comprehension of what I mean."

"I can only judge in a rough and ready way," said Harold, "but I should say there were as great intellects among them as among scientific men. You must trust to them recognising you. Their very distance from you will make it easier for them than for those closer to you."

"What shall I say to them?" asked the old man.

"Tell them exactly what you think – be genuine, let them judge. Write me a letter explaining the danger clearly. I will use it to prepare the way for you."

The old man, surprised at the turn affairs had taken, went into the house to write the letter, and Harold and Laura were left face to face.

He looked at the delicate, lovely figure before him – the joy of the earth, the light of the stars – so real; and to protect her, win her, gain her, meant this scheme of a visionary, the tortuous labyrinthine windings of thought, dark and hidden, touching open day but to produce subversion and a medley of strife. For a moment he was almost saying: "Laura, let this wild dreamer alone; you and I are

real, let us be our simple selves." But what did that lead to? Nothing, save one sweet moment. And that was impossible. He would accept her mission, take the cause of this dreamer on him, see it through, but not use her trust in him to win her. She must not risk her heart in the perilous adventure and the conflict he foresaw. He would not throw those links and ties on her, the desperate grief of breaking which he knew so well himself. The die was cast. Into the tumultuous waters went he; and she, so close a moment before, was as the dear land a swimmer has left behind. He said impatiently:

"How can he, believing what he does, potter round here instead of acting?"

"But you believe in him, Harold?"

"The only thing I can say for him is that he appears ready to recognise his own limitations."

"He is the wisest man that ever lived. If you are not kind to him I shall never speak to you again."

"I'll treat him as well as he deserves."

"Deserves! You are irritated because you can't understand a word he says."

"Exactly."

"Harold, you are dreadfully rough. I can understand how nobody can get on with you. Now, uncle explained it all to me. It's beautiful."

"And I suppose you understood it?"

"Of course, I do, I'm reasonable. You are going quite the wrong way."

"I suppose you know the right way."

"Certainly," said Laura.

The waves incessantly throw themselves against the rocks they can never move; why they love to do so is because they know they can never move them; and so Laura threw herself against the resolution of the man.

"You ought," she said, "to learn what he means and then explain it to others."

"You think the world's made up of sweet reasonableness."

"It's your fault, Harold, to think that everything can be done by violence. I can persuade people a hundred times as well as you."

"The best thing you can do, Laura, is to keep out of it altogether."

"How ungrateful you are! You would never have known anything at all about it if I hadn't told you."

"Once telling is enough."

"I enlisted you and this is how you treat me."

"Listen, Laura! Your uncle and you must start as soon as possible. When you get home stay quietly with your father. Imagine you have dreamt all this."

Laura protested, but Harold was firm. Iron makes very effective implements, but women like to handle something softer. What a contrast it was to the vision her uncle held out of Harold and she, in the fulness of their love, joining together for a supreme effort! Harold didn't say a word of love – simply brushed her aside. "Oh! I am an intelligent human being," she said, "not a doll or a puppet." She looked at him defiantly, but met a gaze worse than her father's.

She felt bruised and helpless and flung aside. Wall made a mistake when he looked at her as he would at an insubordinate private on the field of battle. He ran great risks in treating a high-spirited girl so.

Suddenly the blue sunlit sky was filled with an opalescent mist, all things grew dim and distant, pale and phantom-like, the whole earth became a shadow, and, like creatures lost and groping, that seek but a saviour from eternal solitude, they moved towards one another closer and closer still... and then they heard Farmer coming from the house, and saw the sky was blue again and the sun shining; the day of work was about them, the day of meeting many people, the day of tedious trifles, of danger, labour, pleasure, pains; but never the day of forgetting that vision of themselves alone in a world of shadows.

## **Chapter 8: The Orbian**

Wall found it an easier task than he had expected to gain Farmer a hearing, there was a vague sense of uneasiness and expectation spread abroad. Some vast excavations undertaken by the government in regions where no one had hitherto thought of looking for coal or ore had given rise to a sense of mystery and secrecy.

He himself said nothing of the threatened calamity, but chose auditors of whose judgment, discretion and silence he was well assured, to hear Farmer's message.

Most unexpected of all his successes was the ease with which he gained a hearing for Farmer from the head of the Orbian church. The incidents of the scene are worth recording, as they show the difficulties which attended the promulgation of Farmer's theory, and the arguments by which he endeavoured to overcome them.

The Supreme Pontiff of Unæa, the head of the oldest religion in the State, in which the impulse towards efficient organization and the detachment from the ordinary life of men on the part of the clergy had gone hand in hand through century after century, sat in his audience hall.

Around him were priests who had made each branch of human effort or learning their life-long task, each one tempered to the maxim of absolute obedience, so that when the fiat had gone forth from the frail man, the vicegerent of God, no doubt or hesitation crossed their minds, but that became accepted fact which before they discussed with the utmost freedom and subtlety.

Before him stood Farmer, seeing in him the embodiment of all he hated, the supremacy of something else than reason, the haughty claim to judge otherwise than by the proximate – the prime cause of all error, the reason why the misdirected efforts of men hung bitter and bereft, cajoled and chidden from the true path to the apprehension of the world.

Standing proudly before the frail man – who, sunk in the great throne and robes of state, received him with preternatural silence and abstraction – Farmer began to tell of the astronomical situation and the approaching destruction of the earth.

The pontiff's eye flashed for the first time. "You may assume that as known," he said. "The time for the harvest is brief, and the labourers few. I pray you use all brevity."

This calm acceptance of the situation at the centre, whence not so much as a ruffle had spread over the surface the church showed the world, impressed Farmer. They knew all and showed no signs of trouble! How different to his own agitation, the attitude of these men, who but saw in the end of all a more pressing call to their work!

"Holy father!" he said, using the mode of address of the faith, "I will be as brief as is consistent with the difference of our ways of thought. I come to you because you control the effort of half the world, and if you consent to direct it in a certain way, you can avert this calamity."

"Speak on, my son."

"The beginning of my thought was that everything is in space.

"Every person with whom we come into contact we know as a being in space; every act of our practical lives, every thought we have is derived from things and persons in space; even the revelation in which you believe has the same origin, it comes from a man who was seen and touched.



"And if everything real that we know is in space then that which is not in space is not real. An immaterial existence is nothing. Hence it seemed to me that the only way to know more – to really know it, not imagine it – was to acquire more and more knowledge of things in space.

"I would admit that was much in the universe, beings, persons such as you claim in the traditions of the church; but the only way to know them is to know them as space beings.

"And with this view, the supposition that space had more than two dimensions seemed to me important. Possibly your miraculous accounts might be distorted, and fantastic views of real things and beings we might rationally know in this higher space.

"Possibly, also, much that is unexplained in science might be found to be obscure because of this same fact of space being three dimensional.

"But I was in this position.

"Imagine a man in a society where justice reigns, if he has no sense of justice how will he recognise the part it plays in the institutions of society? It would be no use his saying that everything that is

inexplicable is caused by justice. For there is, no doubt, much that he does not understand of every kind.

"The only way for him to learn about society is for him to form the sense of justice in himself, and when it is formed in him he can recognise the workings of justice about him.

"And, in my case, I had no sense of the shapes and movements that could exist in three dimensional space. The only way possible to tell whether there really were three dimensions was to form the sense of three dimensions in myself.

"Accordingly, though only a two-man myself, I made an account of the simplest things a three-man would have before him. I made objects which represented what a two-man would know by sight and touch of a three-man's objects.

"And I found a sense of three dimensional forms and motions wake in me. They came to seem quite natural to me. It was as if I were really a three-man, and only confined by the condition of my bodily experience to a two-man's thoughts.

"Starting from this assumption, giving the necessary labour to develop my sense of three dimensions, I have come to recognise

clearly that I am really a higher being in face of a higher reality, and can discern something of the undreamed of range of power and opportunity that lies before us.

"What is the relation of the three-man to our bodily frame? We know that we do not perceive outward things directly. Tracing what happens when we see or gain any knowledge through our senses we find that certain changes take place in us. It is these changes that affect our consciousness, not outward objects directly. The incidence of the world of things in that which properly perceives takes place in processes of extreme minuteness."

One of the professors of the sacred college interrupted Farmer at this point by saying:

"You come then upon the mystery of thought. Thought, personality, the self is immaterial and cannot be explained by any of the principles of physics."

"No," replied Farmer, "all I do is to say that before you come to the mystery of self and personality, there is an intermediate domain to explore. Without touching on the mystery of thought you can examine the processes in this domain."

"When you come to the minute operations of nature you come to actions in threefold space, and that which really animates and directs our corporeal frame has this very same kind of activity.

"The three-man is small compared with our bodies, but mere size is no bar to any complexity of structure. We are three-men directing the activity of corporeal frames limited to twofold movements.

"But then the question comes: If there are three dimensions to space why do we only perceive a two-dimensional world?

"There can only be one answer. Because we are limited. In these bodies our freedom of motion is hindered, we can only move in our corporeal frames in two dimensions because something prevents us, prevents all things, these planets, worlds and suns from moving freely.

"That which prevents us I call the alongside being. In whatever direction we point and look we do but choose a direction along its boundary, never a direction into it or away from it. And, with the recognition of this alongside being, at once a new field of possibilities opens.

If we were free in space there would be no way to influence the course of our planet.

"But, being always in contact with this alongside being, if we were able to drive a spike into it we should retard our motion. Also, if you study three dimensions, you would intuitively understand that there is the possibility of pressing an edge into it, so that by properly placing the edge against the alongside being the motion of one's body could be deflected."

At this point Farmer paused, expecting an objection, for this possibility which we can express so easily by the word "skating" was one which offered great difficulties to the Unæan comprehension. We see that a body sliding on a smooth surface can easily be deflected. For instance an ice boat, on the surface of a frozen lake, can have its course altered by altering the inclination of the edge of a blade which bears on the ice. But to the Unæans such a process was entirely inconceivable.

"It can be admitted," said the professor of the sacred college, "that in a space of the kind you imagine there would be possibilities of varied kinds, and the one you suggest may be one of them."

Farmer continued: "I can assure you that this possibility exists, and I connect it with the persistent accounts which have been handed down of people's rising in the air, of a power of rising above the influence of the earth's attraction.

"The origin of all these accounts is, I believe, an obscure sense of the existence of an alongside being and a hidden feeling of a possibility of directing ourselves otherwise than by contact with anything we can see with our eyes or touch with our hands.

"Such a power of directing the movements of our bodies up or down is trivial and unimportant. But it has a bearing of vast importance and consequence. We are on the earth, our bodies are parts of its mass, and any direction we could give to the motion of our bodies, by uniting together the efforts of all men, we could impart to the earth.

"It is plain that if we could direct the course of our planet we could avert the dangers which our too great proximity with Ardaea will bring.

"We have no outward means of acting on this along-side being. We two-men have no such power. But the three-men, who are our real selves, these three-men have the power.

"By thinking of rising, of soaring through the air, the three-man, who is my real self, calls into play activities of his own.

"He acts on the alongside being, he puts an edge into it, so that the motion my body has in common with the whole earth is deflected and I have an upward tendency. I have put this to the proof. I have found that my weight becomes less when I think such thoughts as I have described.

"Now, if all men were to join together in worship, thinking of themselves as rising, as soaring like angels through the air, they would produce a force which would be enough to cause a certain deviation of our planet's course, a very minute one it is true, but all that is needed is a very minute one. Thus we could pass Ardaea in safety."

Farmer's theory was two-fold, first, that by a grouping and re-arranging of the molecular structure of the brain, such material changes could be effected as would cause a body slipping over the surface on which all Astrian things moved to be deflected in its course; and, secondly, that by thinking certain thoughts such molecular changes were produced in the brain matter of the thinkers. He postulated an accord between the conscious thought of rising and soaring, and those minute changes which by a process quite

unknown to the thinker would bring about the realisation of this thought of rising and soaring.

To convey this idea was a task which presented almost insuperable difficulties. He had exhausted the known resources of the Unæan language, and had said all that could be said to men who had not followed his path of thought. Therefore, addressing the supreme pontiff, he concluded with the following words:

"I come to you, for you have the direction of the religious effort of half the human race. If you would decree a form of worship in which certain thoughts should be followed at certain times, and all the fervour of your congregations united, you would set those processes at work by which the three-men, our essential selves could save the world from its approaching catastrophe..."

"Holy father, have you any question to ask me?"

"No, my son, receive the blessing of an old man who, like yourself, has striven to be faithful to the task allotted him."

And so the conference ended.



As was their wont, the supreme head sitting silent in an inactivity almost death-like, the priests discussed the topics of the interview freely.

"It seems to me," said one, "that there is a certain merit in his proposal. It is hardly likely that the people will remain in ignorance of the approaching catastrophe for long, and if they could be persuaded to believe this view they would be led to give their thoughts to worship, there would be perpetual service in our great cathedrals."

"The process of his reasoning is connected, but too involved to produce any effect on the popular mind," said a priest who had given his life to the prosecution of science. "I do not say that he is mentally unbalanced, but he has not lived with his fellows; he does not know what is going on, and he has taken one step after another in solitude till he has come to live in an unreal world. I do not accuse him of conscious deception, but he is one of those whom we may regard infinitesimally little."

"It is curious, this passion for the concrete," said a philosophical professor of the sacred college, "we must always teach in images, men are incapable of believing with fervour and vigour, unless they can think of the object of their belief as palpable and real – you see

this in the present case. Mr. Farmer strayed from the teachings of the church, and from every form of revealed religion, and he has made up for himself a subtle justification for believing in something real, higher than himself."

"Nothing is new," said a young scholar, "we see old thoughts periodically crop up again, old heresies reassert themselves. Before now gross and materialistic minds have held the notion of a minute material soul. This exploded fancy reappears as the three-man. The whole theory of a threefold space is but a figment in which an old heresy artfully conceals itself."

"There is one important question," said a burly prelate, the treasurer of the sacred purse, "since Mr. Farmer knows of the approaching end, others, too, will soon know also; and, as a question of policy, I think it would be best to discontinue our sale of lands. People would think that we had made an interested use of our prior information."

"You think, Cardinal Fairface," said the aged pontiff, with the shadow of a smile round his lips, "that one is more likely to be able to take money than lands to the next world?"

Cardinal Fairface's colour deepened, but he answered humbly, "The effect of the diffusion of the knowledge will certainly have the effect

of lowering values, your Eminence, it was in view of that that I asked your instructions."

"Continue to sell," said the pontiff, "it is of importance that all avocations shall go on as long as possible, and we must be in a position to supplement the faint-hearted."

"What is your Eminence's will with regard to the attitude of the faithful to this man's teaching?" asked a director of consciences.

"His influence is negligible," replied the pontiff, "and any private curiosity need not be checked. After all, it is better to think the soul is little, than to think little of the soul."

## **Chapter 9: Laura Takes a Hand**

On her return to Persepolis, Laura found herself immersed in the same gay whirl of society she had left. On the faces of some of her father's associates she detected traces of the same anxious pre-occupation that was plain on his, but she could find no suspicion on the part of people in general of any definite impending danger. There was a vague sense of uneasiness and restlessness which, no doubt, sprang from a subtle communication of unexpressed thought, but nothing more definite than that. Her uncle held no communication with her, and there was no sign of the activity on which he and Harold had embarked, unless it were a religious revival which involved the presence of ministers and preachers from the most distant regions.

One day she met Harold.

"It's hard," she said, "to do nothing, but I have have not spoken a word."

"That is right."

"Do they believe in uncle's ideas?"

"They think any hope is better than none."

"But you, Harold, what do you think?"

"It is not my part to think. The government has caused the construction of huge excavations all over the land under various pretexts that shows what they think. For my part to follow your uncle is better than to die like a rat in a hole. This very day at the palace of the Orbian pontiff all the clergy of every denomination meet for consultation."

"Harold, that isn't possible!"

"Wonderful, but true."

"Have all those different people laid their opposition aside?"

"We shall see. Keep silent a little longer."

"But Harold, what will it all come to? As soon as the preachers begin explaining to the people, my father will let loose a flood of ridicule. It will all come to nothing."

"They can educate public opinion, Laura."

"You are only telling me the same thing over again. Speak me true, Harold," she answered, flashing on him imperiously.

"It looks as if there were no way out."

"Harold, you ought to persuade the army; if they were determined on a thing nothing could resist them."

"I know my fellow soldiers pretty well, Laura, your uncle's theories would be mere unintelligible words to them. And even if they believed the strong men would not stir. It's bred in our bone, Laura, that we are the servants of the State. I could move a few miserables, but without heart, Laura, without heart. Do you think any of us would break our oath for all your uncle could say?"

"Oh, Harold, what is to become of us?"

"Laura, in the presence of that danger without, incalculable forces are stirring within – neither you nor I know them, they lie outside all your father has scanned with his wary eye. I feel something rising within me alert and ready to seize the moment. And I am preparing the ground. It's not men that would be wanting for any desperate errand I sent them on – but it is weight, force, mass, that I must get. Go home and rest in confidence because I tell you to, and always

remember whatever they say of me in after time, that I was simple and true – your soldier whom you enlisted "

"Harold," she said, "are you very careful? Have you warned my uncle not to say anything to my father?"

"I have asked him not to say anything about me – your father attaches very little importance to his power of persuasion; he has tried to meet your father, I know, to argue the case with him."

"If papa does talk to him, he will find out everything he wants. I must go and make uncle remember how important it is not to say anything about you."

Laura found her uncle so abstracted in thought that she had to speak to him again and again; at last she said: "Uncle, how can you busy yourself so, you ought to be using all your power in persuading people."

"I cannot help thinking," he replied, "that there must be some other way of acting on this alongside being other than by the obscure processes of our minds. I am trying to frame a conception of what the structure of our matter really is."

"Surely it is better to use what you do know, than try to find out something new now."

"Yes," he replied, "for me, yes – though for the young who will grow up in the thought I have laboured to acquire – why, they will laugh to see how I passed over the obvious."

"Then you can attend to me."

"Yes, Laura."

"Have you talked to my father about your plans?"

"Yes, I have."

"But you know how prejudiced he is."

"I know, of course we must expect resistance, but truth and straightforwardness find a path when all other means fail."

"Have you told him of Harold's plans?"

"Harold has no plans except to gain me a hearing."

"But did you tell him you were working with Harold?"



"I may have done, I talked to him freely and he went away expressing the greatest goodwill."

Laura saw very plainly that her uncle was the last person in the world for a conspirator, and she was not reassured by his account of her father's amiability. She resolved to defy Harold and take part herself, but to qualify herself she must understand what her uncle's theory was. Her recollection of it was very misty, but she nerved herself for the strongest intellectual exertion of her life and said, "Now, Uncle, tell me about your ideas, but simply, plainly, so that I can repeat what you say."

Suddenly a rumbling sound beat upon them, the house rocked, Laura seized hold of him in terror.

"It is only what we must expect," he said, "the new direction of attraction has disturbed the balance of the earth's crust, which after all is very delicately poised – there will be many earthquakes of this kind," and unmoved, amidst the rocking of the house and the sound of distant crashes, he took the utmost pains to explain everything to her.

But on her way home through the streets of the city she found a scene of the utmost agitation and confusion. The shock had

frightened some of those who knew the secret into the impression that the end had come, and destroyed their reticence. The news spread and soon everyone from one end of the land to the other would know all. The actual damage was slight, but the effect on the populace was overwhelming, an indescribable panic reigned.

Laura found her father agitated beyond description at her absence.

"My daughter," he said, "I have long been intending to speak to you on a very important subject, but have put it off. I must not let this occasion pass."

Laura told him she knew everything.

"It makes my task the shorter," he replied, "I have decided that the time has come for you to take a husband."

"Not now!" she exclaimed.

"Yes, my girl, some few of us may expect to survive. I have prepared subterranean chambers, which will be stored with all necessary provision, there some of you can pass the time of transition, and emerge to the new order of things."

"Papa, I'd rather die than be shut up like that."

"It is not what you wish. We must strive that some of the best of us, those most fitted to carry on the destiny of our race, shall survive. It is not your part to question – the decision lies altogether beyond your power to alter. And I can easily remove any hesitation you feel. I know you were attracted to that man Harold Wall. Whatever you may have felt for him cannot remain alive a moment longer when I tell you he is making use of this approaching calamity to stir up sedition. He is consumed by a reckless, unscrupulous ambition. He has taken hold of the fantastic moonings of your poor uncle and, using them as a lever, has tried to persuade a number of weak-minded sentimentalists that there is some way of avoiding the danger. He is trying to make this world-peril the occasion of promoting disorder and securing his own ambitions. He has been unceasingly active in drawing closer his relations with his fellow-officers, trying to make them traitors to their oath."

"Papa!"

"Yes. So well has he chosen his confidants that we have had no direct evidence, but the army is penetrated with the knowledge of what I tried to keep secret. The panic that reigns has enabled us to pass special measures. Before nightfall he will be arrested, if he resists, he will be killed on the spot, no mercy will be shown him, – he will be sent to Septentraea – not as leader as he might have been –

but a convict. You can understand the wickedness of the man when I tell you that we have decided to employ a company of Scythian soldiers. We cannot tell to what extent his machinations have gone with the regular troops.”

Her father turned on her the full force of his implacable regard. She felt the iron resolution and the unyielding purpose by which he had won his way and beaten down every opponent. In her powerlessness her only thought was of some means of warning Harold.

He took her silence for submission. "One who has long loved you and who, I believe, has not been without encouragement, is here to-day to urge his suit. You will listen to the dictates of your own heart and of my wish if you accept him."

"But, Papa, I have given encouragement, as you call it, to so many."

"You must know who I mean – Mr. Forest."

"I like Mr. Forest very much."

"Let's have no beating about the bush, my girl. You agree to accept Mr. Forest?"

"How can I say before he asks me."

"No nonsense, girl."

Laura's heart quailed, she was desperate, she must send word to Harold at once. What if she bound herself for life if only she could save Harold now!

"Yes, father," she said.

"Understand me clearly, Laura, you were seen talking to this Wall only to-day. I will not have you implicated. You will not be allowed out of my sight, or away from someone equally competent to guard you till you leave my house for good."

"You don't place much confidence in me, Father."

"How can I with a tell-tale face like yours – no, Laura, you will thank me someday." And he left her.

When she looked up, Edward Forest was before her. "Since you have consented to see me I begin to hope. You have known that my love is yours, will you accept my life-long devotion?"

Her silence gave him courage. He kissed her pallid unresponsive lips. It was too much – what was all her assent, her submission for if

she could not save Harold. Just because her father had taken prudent precautions to prevent her betraying him she felt outraged.

She pushed him away and said, "I wish I were dead."

"Laura, how have I offended you? Your father told me that you did not dislike me."

For a moment she struggled – he looked so forlorn, and a word from her would bring such joy into his face, she would do anything for her – she was sure she could cajole him into taking her message for her. But into her mind came Farmer's words, "Truth and straightforwardness find a way when all other means fail."

She laughed merrily – "Don't look so dejected, Edward," she said, "Papa tricked me, I said I would marry you just to get a chance of speaking to you alone. I suppose if you insist on it you can have me, but there's something much more important than that."

"Nothing to me," he said, "if the world came to an end to-morrow."

"But it isn't coming to an end, we are all going to live happily ever after and you can help, help more than any one man living – you don't know the good tidings and the hope, do you?"

"No, Laura, I've heard that there can't be any."

"Then, Edward, you believe that God made this beautiful world just to be destroyed like that!"

"It makes me not believe in God."

"Edward, I will tell you all about it. You know that in old times men had messages from God that told what His will was."

"Yes, I've heard so."

"And did you ever wonder why it was always through men, not by some great being appearing as big as the sky?"

"No, I have always taken those things on faith."

"Well, I will tell you why. What do you think you are really, your very soul? Don't you think it is something like your body, only filmy and shadowy, not exactly real, but shaped just like your body?"

"Yes, I suppose that is how I think of it, if I think of it at all."

"But that's all wrong. I'll tell you what my uncle says. He has found out that what we call all of space is only a little bit of it. And we are

curiously confined in all the movements our bodies make. There are really three dimensions not only two. The real world is a world of higher space. If we want to think about ourselves in a world of higher space we must go the other way first, and think about a being in a world of lower space. Think of a little creature that is confined to living in a straight line. Such a being would not think of its support at all, but would think what was in front of it; and behind it made up all space, and would not recognise that it was on something. So we, in the threefold world, are supported in a direction we do not know. And just as the line being must really have some thickness, so we have a thickness in a way we cannot point to.

"Now you know that we are told that our souls have come into a world of matter and have taken on themselves the limitations of it. The case really is this: Our souls, which are these higher beings, have come into a part of the universe where the work to be done is in this twofold space of ours. It is as if one of us went into a very narrow tunnel where there was only one direction.

"What this work is we do not know yet, but the beginning of it is to conquer the difficulties of the world, and to live all together unitedly, so that when we know we can act together. And the souls that come into this world form united bands, a great many of all degrees join together and animate a body, but all of them are under one soul



which is one's real self. And this real self soul directs all the others in the body, like a captain directs a lot of men in a ship, each has its work. And the directing soul that has the business of directing our actions, this soul almost forgets its true being; it is very faithful to its work, and is absorbed in it. It thinks it has only two dimensions, and nothing it can see reminds it of its true existence. We are hidden away from all the other souls of the universe, like a man in a narrow tunnel would be from us. If the other souls want to speak to us they have to enter into our conditions, they have to put on one of our limited bodies – that is why the voice of God has always come through men. And now God knows that there is a great danger which will spoil all the work He has sent us here for, so He has sent a soul with a message of what our real condition is, so that recognising our own true way of acting, not the body's but the soul's, we can have quite new ideas of working, and save ourselves."

"But, Laura," said Edward Forest, "what a curious idea you have about the soul; the business of the soul is to do right, to grow good and improve itself."

"No, that is a very poor kind of soul that thinks that," said Laura, "all the men with big souls try to do something in the world – like my father does. He has a big soul but a very mistaken one; of course, good souls would not demean themselves by doing wrong things, if

they can't get what they want honourably, they would rather give up and let another try. There are plenty more. But, Edward, say you believe me, your soul must feel that what I say is true."

"I don't see that it has anything to do with the collision with Ardaea," said he.

"Ah, that is exactly what it has, for we have never thought of that support we are on, we are against something and there is a way of holding on to it so that we can alter the way the earth is going."

"Are you sure of this, Laura?"

"Yes, I am so sure, Edward, and I want to do something to help it on."

"How do you mean?"

"Oh, Edward don't you understand, my father is going to stop it all, and I trust to you."

On Forest's face came an expression so enigmatic that Laura stopped—

"What is the matter, Edward, are you angry?"

"No," he said, "it was a conflict of feelings that made me frown. I do not quite know where I am."

"Here, and ready to help me," she said.

"Yes, of course, Laura," he said, "but there's something else."

"Do you not think," he went on, "that your talents would be thrown away in the domestic circle? There is the making of a most eloquent professor in you."

"Oh, don't say that," she replied.

"When I come home I shall have to call up all my knowledge of mathematics, ghosts, astronomy, and theology too, Laura, I think it would be very exhausting."

She looked at him in alarm.

"I made a proposition to you just now," he continued, "but I did not know your talents. I wonder if you could be induced to allow me to withdraw my proposal."

She looked at him puzzled, a strange mixture of relief and consternation came over her. To have no power over him at all! To

have shrivelled up all his long devotion just by a few words! She couldn't bear it – and yet, not to be bound at all!

"I am waiting for your answer, Laura, may I withdraw?"

"Upon conditions," she replied.

"Yes," he said, "on conditions – I will tell you what they are – that I shall be your very best friend, and that I shall help you in every way I can. What is it you want me to do now, at once?"

"Oh, Edward," she said, with tears of gratitude flowing, "I shall never forget how you understand me."

"Laura," he said, "you are wonderful, you remind me of the prophetesses and sybils of old times. You have a great career before you."

"Now, tell me," he went on in a business-like tone, "I judge there is something very pressing – something you want me to do at once."

"Yes, Edward," she said, "it all depends on you. My uncle knows how to save the world, but gave it up as hopeless to make others join with him till Harold Wall came to him, and told him what to do. And Harold has gained him a hearing. Now my father does not believe in

any of it. He thinks that Harold is taking advantage of people's terror to prepare a revolution. He has an order for his arrest, and is going to send a company of Scythians to arrest him. Now you must warn Harold."

Edward Forest frowned. "With all his judgment, your father is in fatal error. I told him this enrolling of those barbarians as a special regiment was a mistake. There is no doubt of the loyalty of the army, and if there were, such a sign of mistrust would be most foolish. I'll go and tell Wall what you say, but your father is not the man to threaten before he strikes, the blow has probably already fallen."

"No, Edward," she said, "Not yet; I know not yet. For he is keeping me a prisoner here."

"I'll go at once," he replied, " don't be too much alarmed."

## Chapter 10: The Conference

Forest started on his mission none too soon. To explain its result and the events of this day so fruitful of consequences in Unæan history, it is necessary to turn back a few hours, to when as yet in the morning calm still reigned, when the minds of men had not been disturbed by the earthquake, and the only forces at work were those which Wall had set in motion by his successful persistence in claiming a hearing for Farmer. When he met Laura, Wall was on his way to call Farmer to appear before the great council which the Orbian pontiff had summoned. As they proceeded together to the Orbian palace he felt it incumbent on him to make Farmer realise the gravity of the situation. It was not a mere matter of arguments and words as Farmer appeared to think, but the question resolved itself into an antagonism which at any time might be fraught with the most serious consequences.

Cartwright, watchful as ever, had kept himself informed of Farmer's movements. He deeply resented the betrayal of his confidence, and as to anyone really believing in the extraordinary proposals his brother held out, he laughed the idea to scorn. To him the whole movement was a thinly-veiled plot against the government, and if he had not struck before, it was simply due to his failure to move some obstinate members of the council. Wall knew the blow might fall at

any moment, and with Cartwright and his scientific advisers in power, it could not be long delayed.

"You have talked with the clergy of all denominations," he remarked to Farmer, on his way to the council, "what impression have you produced?"

"The clerical mind is curiously constituted, it seems to have lost all grip of actual fact, whether a thing is definitely true or not is the last thing that presents itself to their consideration. What we believe seems to them more or less a matter of choice, and as to what I say they look on it from the point of view of whether it will contribute to the promulgation of their dogmas, not straight and direct."

"Good," said Wall, "the less effect they have produced on you, the more you have probably produced on them, but what did you think of them personally?"

"I dislike them," said Farmer, "the only things we know independently of ourselves are the properties of matter, and generally the physical constitution of things, those we know without any projection of ourselves – they give as pure and impartial views. Where human feelings come in such as right, duty, good, we are at the mercy of our own fancies, our views depend on our training, our

antecedent circumstances, on every kind of prejudice. If there is any revelation it is in the laws of the material universe, with regard to which human feelings count not one jot. Now they reverse the truth and look on feelings of right and wrong as the revelation, whereas they are the distinctively human part. Consequently, they heap on men all sorts of false ideals, and compel us to follow them with all the influence within their power. Happily they have been shorn of the control over men that was once theirs, and have been brought to acquiesce in their dominion being merely one of influence."

"This acquiescence is merely skin deep," said Wall, "a leopard cannot change its spots, and there is no limit to the compulsion they would exercise if they could – quite right too; I hate this amorphous body politic of ours, it wants discipline and fashioning. The only way to move the people is to make it precious uncomfortable for them if they do not go your way. It is a few resolute men who have driven the herd in any of the great movements of history. But as to your criticism of the priests it seems to me entirely irresponsible; you have not had their problems and without experience of their difficulties you have not the slightest possibility of judging of their means. You have got to work with them, and your only chance lies in this, that you in your path have come to something which they in their path of advance have also recognised. Say that it is this way – in your inquiry you have flung aside everything which is not



physically possible, they in their path have flung aside everything which does not ring true to the inmost and most serious nature of men. Do you meet on mutually intelligible ground? Remember this, they have been as earnest in their way as you have been in yours. We meet them to-day and say our last words. Speak in some way that they will understand."

"What do you mean by 'last words'?" asked Farmer.

"You do not suppose that you can have met and talked with so many men without your exertions being the subject of general remark. Even if those you talk to respect your confidence, your brother is likely to suspect you. He has his plans, and is not likely to tolerate any movement which interferes with them. He intends to excavate vast subterranean chambers and stock them with provisions, so that a portion of the race may survive, at any rate for a time. Unless you gain enough influence to over-ride him, you will be effectually silenced. You have a great opportunity. The supreme pontiff has issued an invitation to the priests of every religion to meet him for deliberation in common. He came to the conclusion that, whatever he decided, he could only direct half of the dwellers on the earth, whereas we want all. Action is useless unless it is universal, and he has found that after all it is possible for the disciples of every religion to find common ground."

It was indeed a remarkable assembly that had collected in the palace of the Orbian pontiff. Range upon range of faces of ecclesiastics rose in array, each bearing in his heart a portion of that volition that shapes the aims of men, each bearing in his brain a portion of that responsibility for wielding it rightly that falls on the minister of faith. Out of the uttermost ends of the land they had come, called by presentiment of a demand on them to do something more than influence the individual actions of men.

Political power, in the division of the creeds, had long ago passed from the church. In the complexity of life, in view of the theories of science it had come to be admitted that the direction of affairs lay out of the scope of religion – the private conscience and the ordering of the intimate life alone was theirs.

What was then this strange call – this unheard of summons, which brought them all as possessed of something in common, to that palace which stood for half of them, as the centre of a sublime error?

The summons had been obeyed by them in the light of a thought that perhaps now in these latter days the will of God was to be revealed, not as they held forth in their services, in the duty of a preparation for a world to come, in the maintaining of a standard whose value lay in thought – but, on the contrary, in something quite simple and

direct, as of old times, in the performance of something visible, a simple service in the household of the world.

In the Orbian palace, Farmer stood before the mighty assembly of prelates, priests, and clergy of every de-nomination. The influence and force of their natures so alien to his own seemed to make no impression on him. In a few simple words he placed his thought before them in the manner he judged they would best understand it:

"In the history of our race who can say what is the order and what is the plan by which we came upon these great facts, the knowledge of which reveals to us what we are and gives us mastery and control of our fate?

"There is no order or plan that I can discern save that somehow, when the time has come, we have seized on that which it is important for us to know.

"Thus, in the early ages when our mechanical powers were nothing and when our rational knowledge of nature was ridiculously meagre, you – those with whom you are united as one in the succession of your efforts – you, I say, discovered the soul. There is something in us superior to the body that stands apart, directing it to higher ends than its mere self preservation. But this discovery, great and all

important as it was, was not complete and rounded off; it depended and depends on an inner intuition of man's nature, it was not and is not connected with the rational system of things as known.

"And gradually as the examination into the nature of the material world around us progressed, this discovery of the soul, this near and intimate knowledge became incongruous with the record of our senses.

"For we found no real place to which the soul could go, as in the earliest ages was implicitly believed. We found nothing in the body but an animal organism. And hence to this day when you give your message to the world you rely on other evidence, on other principles than those which govern the reasonable conduct of affairs.

"But I have discovered the soul again. I have discovered it not by the way of inner conviction, not by the overmastering energy of its verdict on our conscience and on our actions. I have discovered it as a real being giving as much for the outlook on this physical world as it has done to enlarge our prospect as human beings. Just as the intuitive knowledge of the soul has raised our moral being above the ways of animals, so does the rational knowledge of the soul raise our intellectual being above the ways of things.

"For in our thought we have lived a life of acquiescence in the subjection of the body, whereas, when we know our true being we find that we – our essential selves, our souls – stand clear of it. And this knowledge comes to us now when it is necessary now when even to preserve ourselves we must rise above the conditions of our subjection.

"I would lead you to the greater higher world. And do not turn from me when you think I speak of insignificant things. You tell us of highest love revealed in common offices. And we reach the freedom of our intellectual being through thoughts of common and insignificant things.

"I tell you that the thought of old time of the soul as real is right, undivested of any of the garb of our life, nay rather clothed upon more and more with an indescribable fulness of being – such you should know it – follow me and you will know the soul rationally and deliberately, as now you know it outleaping the slow steps of reason.

"The path is this. Think of a being confined to a line. You will perhaps think of an insect that cannot rise above its support, but the illustration is not correct, for, inasmuch as the insect feels the support it is on, it has a knowledge of two dimensions. A being

confined to a line would have no idea of anything except that which was in front of him or behind him in that line. And by the very condition of the limitation of his being he regards certain operations as impossible.

"The line being has two extremities which we may call the head end and the tail end. The head points one way and the tail another. By no possibility can the line being interchange these directions. Given two line beings, the head of one pointing in one direction, the head of the other pointing in the other direction, to them it would appear to be impossible that they should be so placed that their heads could point in the same direction.

"We see that they could easily be placed pointing in the same direction, we can turn them round so as to point the same way. We can do this because we can use two dimensions. Not being able to move in two dimensions they think this is an impossibility, they think it is of the nature of space that there should be this impossibility. But we see that the impossibility to them, of disposing themselves so as to point the same way simply shows that they are limited, that they do not possess in their bodily movements the possibilities that actually exist.

"Now coming to ourselves we find an impossibility. Think of equal right-angled triangles symmetrically placed about a straight line. We may shift these triangles for ever but cannot make one occupy the space of the other – there is always some incongruity.

"Now I say that this impossibility is not a real impossibility – it is a consequence of our limitation. If we could move in the third dimension we could easily place one of these triangles so that it would fit in the space of the other. Just as the impossibility the line being finds, which I spoke of, so this impossibility which we find is a sign of our limitation.

"And now consider the line being. The recognition of the second dimension would make him aware that he was always in contact with something – his world is not a world of empty space but of support upon something – there is, where he would think it was free space, an alongside being.

"And similarly with us when we stand upright and move our hands we think we are in free space except for the earth rim on which we stand. But it is not so, there is an alongside being for us too, and however we move we are in contact with it, along it we move our arms whatever way we point.

"And existence itself stretches illimitable, profound, on both sides of that alongside being. Realise this, it follows so that no one can doubt it from what I have said; even begin to realise it and never again will you gaze into the blue arch of the sky without an added sense of mystery. However far in those never-ending depths you cast your vision, it does but glide alongside an existence stretching profound in a direction you know not of.

"And knowing this, something of the old sense of the wonder of the heavens comes to us, for no longer do constellations fill all space with an endless repetition of sameness, but there is the possibility of a sudden and wonderful apprehension of beings such as those of old time dreamed of could we but look athwart this all of sense, know that which lies each side of all the visible.

"Such an apprehension lies in the future – what is the meaning for us now?

"To interpret the mystery of our being, to discover our relation to the wider universe, go back and ask yourselves how a line being could exist. No real being could exist in a line. A real thing or beings must have all the dimensions there are. But a real being like ourselves, possessed, as cannot be denied, of two dimensions, can be put in such circumstances that it has only a one dimensional experience. It



can be part of a structure or organization which is limited to one dimensional movement.

"Think for instance of a ship which moves on the water. It can only move in a line. Imagine its captain directing it, if he were unconscious of his own movements and simply had regard in all his thoughts to the motion of the ship and identified himself with it, he would look on himself as a line being. But if by any means the idea came to him that there were two dimensions, if he could interrogate his own bodily consciousness, realise himself separate and apart from that which he directs, he would have plenty of experience of two dimensional movements. All he would have to do would be to wake himself up to his own essential mode of being.

"And similarly with ourselves.

"We, essentially, are higher beings possessed of a higher kind of action than we realise in our bodily movements. This being, that is essentially ourselves, is the soul, and just as it has waked up to a knowledge of itself in conduct, has recognised that it is the master of the body and stands apart from and superior to a mere animal life, so it now is ready to wake up and recognise that it is superior to the ways of things. The movements of the body are inferior to, less ample than, our own movements. The mechanics and movements

cognate to the soul are superior to those it can apprehend through sense, are superior to those it sees through the bodily vision.

"The proof of this lies in trying it. I have waked up my soul, and I can think of three dimensional things and how they act and react on one another.

"And I have found what lies beyond all I have been telling you, that just as the captain of a ship has an activity independent of the ship, so our souls have an activity independent of the body. Our souls can act on the alongside being. We, the earth, and all slip rapidly over the alongside being in the course of our planet's motion. In any movement we make with our bodies we do but act on things all equally subject to this motion. But our souls can act on the alongside being directly. And by this action we have the possibility of influencing the directions of our movements apart from pushing against or pulling anything we can see.

"At present exactly how this is done is obscure, these organs in the body by which the soul effects this result are too minute for us to distinguish them, all that we know is that we can rationally predict their existence. And those old legends of men raising themselves or flying through the air have their basis in the very fact of a relation to the alongside being which enables a man by the activity of his soul,

not directed in the way of any of our ordinary bodily manifestations, to change the direction of his motion relatively to that of the earth.

"If, filling my mind with devotion, I think of myself as soaring, as rising like an angel through the air, my soul does that which would make me rise, altering my direction by acting on the alongside being.

“If all men were to have the same thoughts, then all of them would tend to rise, and the united force would be very great, enough to influence the course of the earth in its orbit. The force would be great enough, but, unless regulated, that which was exerted at one time would neutralise that which was exerted at another time.

"If, however, we properly choose our times, then by devotional exercises, by the whole human race uniting together in the thought of a glorified rising and soaring above the earth, we can influence the course of our planet, we can effect that small deviation of our course which will enable us to pass Ardaea in safety.

"You are now face to face with the question. The danger is real. It forces us to leave off trying to explain the world by our ideas and try instead to conceive the reality."

Now there were in Astria a class of philosophers who looked on the all as one great being bent on his self development. They said that different individuals were but his ways of imperfectly and partially apprehending his own thoughts. Among some denominations these philosophers were considered to have made a valuable contribution to the support of religion, and were regarded as very profound. One of them rose up and said:

"We can never go outside our own ideas; it is absurd to speak of reality as if it were any different from an idea."

"I will not stay," said Farmer, "to discuss this question, which is merely one of words. I have found, for my part, that words never have any definite meaning when you take them close, but held at a distance they serve very well to point out a general tendency, or suggest a contrast. And the contrast I alluded to is plain. From our two dimensional solids we have, we obtain by abstraction, the idea of an edge bounding them. And from this edge or line, we can make the further abstraction of a point. We can try to explain the world by using these abstractions, these ideas, or we can, on the other hand, try to conceive that with regard to which things, as we think them, are mere abstractions. We must form ideas which we have not got. And in the face of that necessity, which has occurred before now, I believe that the rough and ready way we have of contrasting our

ideas with reality points to and indicates a distinction in our way of proceeding. To cope with Ardaea we must obtain new ideas, for with our present ideas, as you know well, there is no possibility of avoiding destruction.

"I have found that by thinking certain thoughts, I can volitionally direct the activity of that real being, my soul. I can alter my weight. There is a power in everyone of doing this. Now an alteration of weight can only come by our acting on the alongside being, and this is the very action which is necessary to alter the course of our planet. Our souls have this power. By introducing the thoughts which produce this action into your forms of worship and inducing your congregations to follow them with fervent piety, you can alter the course of the earth and pass Ardaea in safety. Every being must sometimes come to reckon with the absolute facts of its being or perish. That is our case now. Though placed as far as our bodily vicissitudes in a two-dimensional state, we must act according to the three-dimensional reality.

"And as your congregations by this worship gradually bring safety to the world, you can inculcate the truth, which they will at first act on unreasoning and blindly; you can tell them of a real soul, you yourselves will not grope blindly about in tradition, but discover more about the soul, you will approach its study, not from the side of

consciousness only, but as an objective reality. And if you hesitate to take my view, because you think you demean the soul by considering it small, you must remember, that though small in any way you can measure, yet it has a thickness in a direction you cannot point to. There is more in a square, however small, than in an infinite line. And so one soul has matter enough in it to make up endless universes such as we conceive them."

All through this speech the Orbian pontiff sat unmoved, his face, pallid and emaciated, was as that of death, to which no words can come, and his gaze was as if sunk in some profound region from which it would never return.

The first to take up the word was a bishop of the Literal Church, whose doctrine was a faithful adherence to the sacred texts.

"Brethren," he said, "in commencing our deliberations on what we have heard, our first thought must be, 'How does it agree with the message we are pledged to deliver to the world?' Ours is the message of salvation, not of mere earthly good, and we must not let any promise, however fair, quench the light we have, or tend to weaken us in the promulgation of the truth."

Farmer broke in:

"Yes, you see that it destroys every vestige of what you teach and inculcate. For want of anything else real to think about, you identify yourselves with these bodies, and all your notions of right and wrong are centred in the bodily relations. You believe the earth is a place for the display of virtues. What you eat, drink, how you marry, get unmarried, how you tend your own and your neighbour's body – that is all your thought. Not a glimmer in all you teach of the real work of man, but pitiless immersion in the utterly insignificant."

Wall could detect no sign passing from the Orbian chair, but some indication must have been conveyed, for a great prelate close to the pontiff rose.

"Our thanks are due to Mr. Farmer," he said, "for putting so lucidly before us the real question for our consideration. Mr. Farmer has arrived at a new conception of the body and, if he is correct, it will require a reconsideration of our ideas with regard to the soul, these two aspects can never be confounded, and his criticism of us in the light of his new conception of the bodily, will be most welcomely received. But that question has nothing to do with our present deliberations. They are, I take it, directed to our practical action."

These few words sufficed to turn the discussion to relevant topics. A period of earnest debate set in, and the minds of the participants

were so absorbed that they paid but scant attention to the shaking of the walls when the earthquake came, and paid no attention to the messages which told them of the disturbed state of the populace. One speaker after another gave his reasons for and against Farmer's views, and gradually the sense of the meeting came to declare itself in favour of making a public exposition of them in every part of the earth, and bringing all possible pressure to bear on the government to appoint a commission of enquiry. A motion to adjourn was proposed. But Wall stepped forward, his heavy sword hitting the steps to where he descended in their midst.

"There is a voice," he said, "which speaks within every man, telling him at the last extremity what to do. That is the voice of God. And in you is the voice of God to men. Many times before now you have declared it. It is no time to turn this way and that. Either this man is of God and we believe him, or he is of the devil and we leave him. Before you I lay down a staff" – and he made a gesture of flinging something before them – "it is an iron staff and whom it smites it crushes. It is the army. Its honour is in obedience; if you command it in the name of God, in whose name stands the vow of every commission, all other allegiance is dissolved. As one man waiting to hear the voice of God, the army stands before you."



The solemnity of the moment grew clear to them, as the indescribable weight of the man who had spoken pervaded the silence. Almost it seemed as if no breath were drawn in that vast gathering. One word would unchain the deep. From the loosening of that incalculable power embodied in that one man, the man of peace shrank, appalled at his simple words... The Orbian pontiff and all his priests, prelates, and monks had arisen. From the lips of that frail old man, came a voice clear and solemn.

"God has spoken," he said, "through the voice of the servant whom he has chosen, he has saved the world." Then, placing his hand on Wall, he said, "I absolve you from your oath. Take the message of Salvation forth to the world."

Forth from the Orbian palace a vast procession went, coming with a message of peace and rest to the distracted populace. But even as they emerged from the noble dome, a company of dark-skinned soldiers came upon them. These ignorant men were deeply superstitious and, according to their wont, they bowed down to let the religious procession pass without waiting for their officer's command. Forest, who had overtaken them, saw his opportunity and pressing forward told the errand on which the men had come. Many a heart quailed. So near and yet so far that hope. And the old curse of the land, the Scythian foe of Unæa here in this reincarnation, the old

peril was ready to strike the fairest hopes. But the Orbian pontiff advanced unmoved, and a very effulgence of the Divine power glowed in the slanting rays of the sun – illuminating his solitary figure. He spoke. The superstitious emotional nature of the men before him made them like wax in his hands. He told them of the end of the world, decreed for their sins, and the death they had all merited – then spoke of pardon and hope. Weeping and shouting they went before him to carry the message, and their officers returned, their mission unfulfilled.

But such men were not to be relied on. Wall knew the temper of the army. He had told his fellow officers of the danger which threatened, together they had discussed the measures which the government had taken for meeting it, they had together felt the impotence and inefficiency of the central authority. He had told them of a plan which had been devised, which the government had rejected – and when they asked him more, he had simply said that, being soldiers bound by their oath, they could do nothing. Whether Astria perished or survived they were but instruments, used simply to strike at others' judgment. To minds thus prepared, the sudden assumption of power by the ministers of God, came as a light from Heaven revealing their only path. Men ready for instant action gathered round Wall, the others were hesitating and loth to assume responsibility and, almost without a struggle, the military

organization of Unæa turned to its new masters. The sword rested in other hands.

In the city where panic reigned and even the foundations trembled, the only thing secure and firm on which men could trust and place their reliance, was the authoritative decree of the ministers of religion, who, dispersing on either hand, brought certain assurance to all. By nightfall the spread of the moral force emanating from the new arbiters of the nation's destiny was such, that those, and they were many, who antagonized Wall, could find no men to lead against him. He was master of the situation. He gave orders for the arrest of all of the political leaders from whom he apprehended danger, dissolved the representative assemblies. Close on the wave of despair, which spreading all over the country told of the destruction and death of the world, came another, telling of hope, a Divine interregnum, a reorganization, a marvellous deliverance. A bidding was winged to the ends of the earth, calling all to prepare for a universal effort, in which, and by which, only, the salvation of the world was to be wrought.

In these halls where the representatives of the nation had sat, each bound to some sectional interest, concerned with the incidence of taxation, the advancement of local interests, there now presided the pontiff of the Orbian church, supreme through the union of his

followers, directing the councils of an ecclesiastic assembly. The first task before them was easy. Farmer had drawn up a minute set of regulations, describing the thoughts, attitudes and hours of the religious services to be held.

Recognising that any attempt to explain the physical reasoning on which these regulations were based, would be worse than useless, they issued an absolute and unqualified demand for obedience to these rules, and, martial law being decreed all through the land, could count on their enforcement. But there remained the question of the economic reorganization of society.

All avocations, so Farmer asserted, must be suspended, save such as were necessary for the provision of sustenance for the race. The question of wages, the means of distribution, the total subversion of all the procedure of civil society met them.

In the midst of the debates with which they attacked these problems, news suddenly came that the arsenal had been seized by a band of malcontents, and that communication with the western part of Astria was interrupted. The arsenal was a strong fortification which had been built in the time of the old wars, and was now used by experts employed by the State, engaged in the manufacture of explosives. The place was strong, its defenders were sure to be well provided

with the munitions of war. It was a rock on which the newly-launched vessel of State might well founder.

## Chapter 11: Cartwright Conspires

CARTWRIGHT had found a secure hiding place. He kept his finger too closely on the pulse of events to be caught like his colleagues in the net which Wall had thrown over them. With him were the historian Lake, Flower, Laura's evolutionary friend, and Agatha, who, disguised as a market woman – such was her devotion – played the part of a messenger. They were gathered about the man whom they all recognised as the ablest in the State, and who now rising in moral grandeur, as all the means and resources, parties and adherents, whom he conciliated, manipulated and controlled, were swept away, stood strong in conscious integrity, the last stay and hope of the State in its desperate danger.

"This is outrageous," said Lake, "a madness has come over our land. And what staggers me most, is the insolence of it all. It is a violation of Reason, the Reason which, not in this man or that, but in the whole of humanity, in all the efforts of the best men, has built up our institutions and State – this Reason has been violated and abused because of one erratic thinker."

"That Reason," said Cartwright, "is a mere name, standing for nothing except in so far as it is efficient in you and me, the question is, what is to be done?"

"But it's an accomplished fact."

"Then I want a more accomplished fact."

"Impossible," said Lake, "the country is handed over to superstition. Every rational man is outraged, but the army is a perfectly unreasoning instrument, and the clergy hold the masses. The force of arms and the force of the mob are both against us."

"Civilization," said Flower, "has lost more in one day than it has gained in the past thousand years. The priests will habituate the people to a blind worship and trust in the supernatural, all real liberty of thought will perish."

"What do our scientific friends say, Agatha?" asked Cartwright.

"You should have heard them pull Mr. Farmer's theories to pieces," she replied. "He addressed a meeting, he had no right to show his face in any scientific assembly, as he had resigned from all the societies long ago. But he actually put in an appearance. They asked him if science did not begin in observation and experiment. He had nothing to say. Then they asked him 'if a third dimension, why not a fourth.' You should have seen how confused he was; he began to say something about altering his weight by an effort of the will. The

silence that came froze even him up. Science rebuked him, although he had the whole force of the State at his back."

Cartwright looked at Agatha. "It is curious," he said, meditatively, "that science, which is the master of force, should have none."

"It's the fault of our educational system, we should have banished everything except rational instruction," said Flower, "then the priests would not have had this opportunity."

"It is easy to say we should have done differently," said Cartwright, "I, for one, acted according to the best of my judgment. I have had my eye on this man Wall for a long time, but I underestimated his ambition. As a man of mediocre intelligence he owes everything to opportunity. Through an abominable breach of my confidence, brought about by my brother's weak folly, he obtained possession of my secret, and without thought of anything else applied it to work his personal advancement. Can you conceive anything more odious than, in this universal peril, to aim solely at one's own personal interest? While those of us who knew were absorbed in care for the world, he through a surreptitious means obtained our knowledge, and used it unscrupulously. Such a man is to be put out of existence as unhesitatingly as a mad dog. And he's the practical ruler of Austria to-day!"



"No," said Agatha, "he says he is obeying the orders of the Orbians."

"He says so," replied Cartwright, "see how long that lasts. The greatness of Astria has come to this! But I have a plan. Agatha, you are a woman, but on you depends everything – you can come and go unsuspected. You must drop all womanly weakness and work as no man ever worked for your country's salvation."

"I will do everything a woman can do," said Agatha.

"We must take a leaf out of our enemy's book," said Cartwright. "He gained his success by putting a blind force in the hands of a class – by handing over the army to the church. We must work by putting a force in the hands of an opposing class. The scientific men must save the country, and the force – it is already theirs." His listeners stared incredulously, but Cartwright continued, "The chemists have lately discovered a new explosive, ten times as powerful as the old kinds, and which can be hurled twice as far in our weapons of projection. There is one weak spot in Wall's armour, He has not removed the chemists from the arsenal. They have enough of their explosives to destroy the guards in that fortress, and to frighten anybody of troops that attacks them – its power is terrible. Now Agatha, you must go round to those whose names I give you, and tell them to collect all those scientific workers they can absolutely depend on in the

neighbourhood of the arsenal. Then you will tell the experts working there what to do – they pass in and out freely, there will be no difficulty in that. At a pre-appointed time they must annihilate the garrison, the men gathered outside can enter, and science has an army which, with this new explosive, can destroy any number of troops armed with the old projectiles. The supply already in existence is ample for first operations. We will temporize for awhile until an ample supply has been made, the process of manufacture takes only three days. Then we are masters. I shall take the risk of discovery and join the crowd waiting outside the arsenal, and lead you all to victory. This plot of Wall's has grown up like a mushroom in darkness. The daylight of science will wither its poisonous growth."

## **Chapter 12: The Assault**

DIRECTLY the sound of firing came, Wall hastened towards the arsenal. Deeming the affair some mere riot which a few words would quiet, he responded to the flag of truce waved from the ramparts, and going forward to meet the emissary of those within, found himself face to face with Cartwright. The latter said: " I am the representative of every man of scientific eminence in our capital. We are not many in numbers, but are determined to die rather than acquiesce in the rule of mere superstition. Will you convey a message from us to the hierarchy?"

"I will listen to what you say," said Wall.

"First I say this, that we all condemn your treachery – you have traded on the discontent of the army to hand over the State to fanatics."

"What is your message?" asked Wall.

"I am coming to it. One thing I must add. It is merely personal, but since this is the last time we meet I must tell you, that you may realise the universal condemnation of your action. When my daughter heard of what you had done, she repudiated you. I do not

know what kind of informal understanding there was between you. It is all over now. She is the affianced wife of my friend Forest. She begged him, however, to save you from the men I had sent to arrest you, and shoot you down if need be. So Forest warned you and ruined my plans. If you have succeeded it is merely by Forest's generosity to a defeated rival."

"Is this the message you want to send?" asked Wall.

"No, this is it. We are a small but determined body, we will blow the fortress up rather than yield, hoping thus to raise our fellow-citizens to rise against the tyranny. But, at the same time, if there is anything in your plan, if you have a possible plan at all for saving Astria from the impending calamity, we are willing to give up our resistance. Let us confer with your representatives, spend one day in discussion, then on the morrow we will come to a decision. If there is any reasonable expectation of the success of your plan, we will loyally co-operate."

"You have already had your opportunity of discussion."

"Believe me, we shall weigh the evidence in a different spirit, now that we know that death awaits us if we do not agree. We may have

been too hasty then, but science is ready to inspire a martyr's death as well as religion."

"I refuse to take your message," said Wall. "I will give you an hour, and if you do not submit you must take the consequences."

Cartwright had prepared his words with the utmost care. By telling Wall unwelcome truths he hoped to make him accept as true his description of the attitude of his party. The only object he had was, somehow or another, to gain a couple of days before the inevitable assault took place. There was ammunition enough for one day's fighting. Two days' respite would give them command of the situation. He had failed in making any impression on Wall, but in view of any failure of communication in the field, had, with his usual forethought, arranged for the delivery of written communications to a number of the members of the council, and the presentation of his arguments by trusted confederates. Consequently, instead of being left free to act, Wall received a message summoning him to receive the verdict of the deliberations of the supreme body. In the chamber various opinions were expressed as to the proper course to be pursued in the face of this rebellion, so insignificant in numbers, yet so significant of the attitude of the educated classes.

"They have struck at our authority, they must be instantly punished, no parley is possible," said the most fanatical.

"The revolution has been without bloodshed or violence on our part. Let us not stain it if a day's delay will gain our point," said the most gentle and moderate. Others said that to refuse to argue with these unbelievers would have a bad effect. A bishop, speaking for the Reformed Church, argued that it would show cowardice to resort to force of arms instead of relying on the force of reason, it would imply an uncertainty of conviction, but if their present opponents were convinced by argument, it would remove, once and for all, every ground for antagonism.

Now," he said, "is the only time in which the recusants meet us on equal terms. If we convince them now, hereafter no one can urge that we impose our views by compulsion. Moreover, let not the guilt of bloodshed rest on us. Many lives would be lost in an attack. Let us not take this responsibility till all other means have failed."

As the final outcome, it was voted by a large majority that operations against the rebels should be suspended for a day, and their representatives received for a conference with Farmer.

Wall sat in the place reserved for him, his head bent down, scarcely hearing what was said. Over his dull and aching sense spread the mephistism of perfidy. How false he was, this fair speaking Cartwright, and Laura his daughter, she perfidious too! How well the father acted his robust part of stalwart liar – the daughter, too, had she lied in every look and word and inflection of voice? And within him sprang up that only resource of the wild animal before the hunter, the simple before the subtle layer of nets – the desire, the rage for an instant spring. The crafty worker of lies, the father – the daughter the luring scorner and perfidious entrancer – to fight the father, to forget the other, was the only way a simple soul could rise out of the accursed entanglement for ever weaving about him.

He rose and said: "Use economy of inspiration. It will not spread over the affairs of every day. This is a snare no child would fall in. Do you suppose a number of decent, upright men murdered the guards in the arsenal – for it was nothing else than murder – because they wanted an opportunity of argument. That's a mere pretext. There is some plot behind, for which they want to gain time. The arsenal must fall, if it costs our last man. And you, what are you doing here? Your place is with your congregations. Every one of you, from the highest to the lowest, is needed in that field. Leave all power in one man's hands, to settle things, right or wrong, promptly, and bend all our energies to the work."

And he strode out, took up his station before the arsenal, and launched his storming parties at the place.



## Chapter 13: The Siege

WITH the first discharge from the fortress, Cartwright's specious pretences were unveiled, and a new phenomenon of warfare was revealed in all its sinister significance.

The range of fire of the defenders reached to an incredible distance, the foremost of the assaulting detachments were swept away, annihilated. The bravest troops of Astria hesitated and shrank to enter the zone of dust and carnage. To avert the spread of the panic, Wall ordered a stay of the assault, withdrew his forces from sight of the blood-stained plain and waited for a few hours, till great piles of wood had been collected and lit. The breeze blew towards the arsenal and, in the all-enveloping smoke, he sent party after party in open order. Into that infernal darkness, throbbing with the crash and roar of mangling ex-plosions, whence now and again some half-crazed man emerged pallid with fear, he poured his troops like water. Presently the wind shifted, but darkness came on and still when one regiment had gone, had passed to its doom, he sent another. And Ardaea rising malignant in the East looked down asking what worse destruction she could wreak than this that the doomed souls wrought on one another. At daybreak, the plain was thick with bodies right up to the fortress, fragments of scaling ladders lay against its wall, and

one figure rising from the unnumbered dead rushed on waving his hands, to fall by a shot directed almost straight down.

Wall recognised the meaning of the unknown hero's action. "The moat is filled," he said to the group of officers beside him.

In the dawning light the enemy seemed to play with their attackers, with a horrible sportiveness they would let a number approach, and suddenly sweep them away. Then again with their first violence of fire they would sweep the ground far and near.

Two generals stepped forward, grey with years of honourable service.

"You have not called a council of war, sir," said one of them, "but it is time you should, it is impossible to let this carnage continue – it is not war."

Wall took the book of orders of the day from the lieutenant in charge. He wrote, "The assault will continue till I countermand it," then handing the book back, he placed himself at the head of the detachment emerging from shelter. It was in one of the lulls of fury. Far on towards the distant ramparts he walked, leading his men, till he could easily discern the defenders manning it. And all behind him

the Unæan army hearing that he had gone, and knowing that these orders would never be countermanded, surged up the hill behind which they were formed and over the brow of it, precipitating themselves in the valley of death.

From the ramparts, Cartwright saw the new movement, saw the swarming numbers.

"The ammunition is running low," said his aide, "there are but a hundred bombs left; perhaps one great discharge will terrify them." Cartwright looked again – the plain was alive with men, and in front his hated foe. Wall was there! – as easy to shoot him down, as to cross his hands.

Cartwright struck his brow. "By God, the man's sincere." A strange emotion swept across his great heart. Despite all his chicanery and schemes, there burnt in him glowing love for Unæa, essentially he loved his land, 'twas only so he found the force that gave him dominance and power.

"He has beaten me," he said, "the credulous fool – he cares for Unæa, let him live." And, springing to his full height, he waved his arms in token of truce. Wall kept on, reserving his men's fire.

"We will make terms – stop!" cried Cartwright. "I will make no terms," answered Wall.

Cartwright turned round. "It is no use," he said to his followers. "We could but kill a few more."

And so in the sullen silence of the last representatives of the light of reason, Wall entered the fortress. A great shout went up all over the plain – men threw themselves down on the mangled bodies, kissing them, calling them heroes, blessing them, for in all Unæa's wars, never had she so true children as those who had died that day.

At Wall's quarters, after the fall of the arsenal, the principal officers of the army met to discuss the affairs of the day. Despite the sense of personal bereavement, which every one felt at the loss of so many of their comrades, a feeling of profound contentment was in every heart. The piping times of peace had not destroyed the spirit of the army. Those men there stood out as worthy as any of those who had borne the destinies of Unæa in their hands. They felt for Wall the instinctive gratitude which men always feel towards one who brings out, to the bitter end, all they are capable of doing. Added to their appreciation of his inflexible rigidity, the smiting edge which his unyielding determination gave them, was a sense of something

extra-ordinary in his personal ascendancy. The arsenal had fallen before him. The defenders had quailed before him.

One of the oldest of the veterans, putting his hand on Wall's shoulder, said:

"It's just what your father would have done. He would have sent the last man."

"Brother soldiers," said Wall, "we have done our part faithfully. But there is a limit beyond which no instrument ought to be used by incapable hands. We have escaped the curse of one deliberative assembly, only to fall under that of another. In your name I shall demand that the plain common sense course be adopted. The affairs of the nation must be put into competent hands till this crisis is over."

"Haven't you heard," said Beam, "the assembly discussed and discussed till you took the arsenal. Then they all went as you had told them – perhaps you forget. That speech of yours had a wonderful effect."

Wall frowned.

Beam's delusion that speeches and speech-making had an influence on the course of events became at times grotesquely wearisome.

"I recognise," he said, "the hand of the Orbian. It must have cost him something, when he had attained the summit of his church's age-long ambition, to relinquish it. Fellow soldiers, I am left with his deputed power. May I use it wisely and render it up as faithfully, when this crisis is past."

Wall's assumption of power was received by his comrades as the logical sequence of events. No dissentient voice was raised; with this complete absence of formality his authority was recognised, and as if it were a mere minor event the discussion passed on to questions of detail which required immediate attention.

"There is a great deal of anxiety felt for the prisoners, general, on the part of their families," said an officer. "I have let it be known that you have put a strong guard over them to protect them from immediate violence, but the question I can't answer is, what are you going to do with them?"

"You can answer that their lives are safe," said Wall.

"Pardon me," said Beam, "but I think you could turn them from enemies into your most devoted adherents."

"How would you improve the occasion?" replied Wall.

"I would speak to them in language something of this kind," said Beam.

"I fail to find any justification for your rebellion. You have no plan for saving Astria, your object, as far as people understand it, is said to have been to keep the holes in the earth in which you want to creep your-selves, and prevent a fair distribution of those miserable refuges. It is hard to draw any distinction between you and ordinary murderers. You must have a trial. But in the present animosity against you it would be difficult to secure a fair one. The provisional government which I direct, has no wish to embarrass itself with that problem. My problem is to organize the State to meet our danger, and your trial can be left to the body into whose hands I hand over the power. What the constitution of that body will be depends largely on how you acquit yourselves in the eyes of the people. Every resource of science is necessary for our task, and the devotion of every inhabitant of Astria."

Beam glowed with enthusiasm.

"A very nice speech," said Wall, "I wish I had your talent, Beam, but what effect would it have? Can you imagine any circumstances under which Cartwright wouldn't plot against me?"

"There are others besides him," said Beam.

"Yes, a good many others, I've had some of their prisoners questioned already, and a number of very wealthy men are implicated. I am going to confiscate the property of every one concerned and let them go as soon as the excitement has died down, their talk against me will be an advertisement to others not to risk losing their money, too. Our chief problem will be to provide funds in the necessary dislocation of all ordinary business, and this source of supply will tide over the first difficulty."

Despite the press of affairs which claimed his attention, Wall found opportunity to make a hurried journey to the town to which Laura had gone. He entered her presence with none of the gladness she had expected to see on his face. How different his words were from what she expected!

"I hear, Laura, you promised to marry Forest," he said. "Is that true?" Laura found no words. What if she had promised to marry Forest? It was in his dire extremity to save him. Why should he mind that? She



had no idea that he did not know all the circumstances, as the only person who could have told him she thought would be Forest. She was outraged and indignant, was this his trust and faith in her?

"Yes," she answered, looking at him proudly.

"I could not believe it, till I had heard it from your own lips," he answered. In a haze – in a miserable haze and blight, she saw him depart, a cruel hand clutching her heart making her unable to speak, returning the last look he gave her haughtily and coldly.

## Chapter 14: The New Order

ONE of our philosophers fresh from the discovery of the first of the mechanical powers, the lever, exclaimed, " Give me where I can stand and I can move the world."

And, in a similar manner, an early philosopher of Unæa seeing the extraordinary power of progression which was given in their first attempts at navigation by being on the water instead of in it, when he saw how the rudest boat or raft gave men an enormous power by the mere fact of their being in one medium and acting on another, he exclaimed, "Give me a difference and I can do anything."

It was to utilise a difference that the Unæans applied themselves, a difference indistinguishable to the senses, predicted only by an obscure theory and to be made use of only by a more obscure deduction. Yet to such efforts they set themselves. The terrible cold of the winter as it came on seemed to point with an icy finger, warning them of their danger. All over the land and most of all in the populous cities, services were daily held, and the ritual devised by Farmer carried out. As might be conjectured, the more highly educated classes were indifferent and unwilling attendants. The refuges, the vast underground chambers which Cartwright had constructed, seemed to them to afford a more rational precaution.

But in ignorance and through blind obedience the masses performed their part faithfully. To active minds the restraint of ordinary occupations, the fettering of the free activities of competition, and the inculcation of mental habits as a duty was irksome in the extreme. Cartwright looked on these feelings of dissatisfaction with complacency, but refrained for the time being from all overt acts.

From the wreck of his fortunes he had managed to preserve a few rods of land containing the results of many years' experiments on the adaptation of cereals to altered conditions of heat and cold. He had succeeded in developing a variety which, under the new climatic conditions of Astria, gave a yield of undiminished prolificity, while all ordinary kinds were seriously impaired in fertility. After his brief eclipse he reappeared as the head of the influential board of directors of a Corporation for Scientific Agriculture, living in all his former state. After a meeting one day, he detained Forest.

"My daughter has told me," he said, "that you and she agreed to terminate your engagement. I can appreciate the tact which you showed. In her state of agitation, and under the influences to which she had been exposed, she was hardly herself."

"I judged that the time was inappropriate," said Forest, "but my object is unchanged."

"How deep your attachment is I judge from the terrible mistake she led you to commit. It is not certain, but quite possible, that the men I sent would have succeeded in arresting Wall at the very moment of his triumph, and all this frightful subversal would have been avoided."

"But possibly there is something in Farmer's plan."

"Really, my dear Forest, that's not worthy of you. Nothing is more certain than that space extends in only two dimensions. The very notion of a third dimension is a freak of the imagination. The only people who would tolerate the assumption for a moment are these mathematicians who love paradoxes for their own sake, and have a mania for believing things in proportion to their incredibility. Even supposing for the sake of argument such an assumption were true, the absurdity of altering the earth's course by the way you hold your head and the thoughts you think, is little short of pure insanity. No, my friend, what happened to you is what happens to many a man – you were completely carried away by a woman. We men know that that's liable to happen to all of us, the strongest and best of us – I know it of my own experience – and we make allowances, if it doesn't happen too often. Now our upstart dictator's power will collapse speedily. When we take to the refuges I have prepared, who will pay any more attention to him? Or, if we do not, if our planet

sails safely past the danger point, no one will believe that his ridiculous ceremonies were the cause. He will disappear in ridicule. The people will not tolerate for long his interference with all their liberties. A military adventurer cannot hold a State like ours permanently. At present, despite his power, he is ostracized by all the best people. Laura runs no danger of meeting him, and I have found her singularly tractable. She has not seen him, or tried to correspond with him. You have her sympathy and friendship, and every opportunity. Press your advantage. I should counsel a speedy and private wedding, for there is no knowing what arbitrary acts of violence the adventurer may resort to if he finds his prey escaping him. At present, however, he shows no sign of making any advances. He is probably eaten up with pride in his success."

"He has appointed me Commissioner for the Alban Lake District," said Forest.

"Taking away the administration of your income, he gives you something to occupy your time, as he does so many others. The region is not so far distant, you can practically reside here."

A year had passed. Farmer, now head of the Bureau of Regulations for Religious Services, lived in Persepolis. Cartwright's home was a meeting place for all those who disapproved of the new regime, and

Laura was surrounded by influences inimical to Harold. She often visited her uncle, but he, absorbed in his occupations, had only alluded to Harold indirectly, till one day their conversation took a more intimate turn.

"When will Harold come back?" asked Farmer.

"I don't know," replied Laura.

"That is strange. Hasn't he written to you lately?"

"No, Uncle, why should he?"

"But, Laura, surely nothing has come between you?"

"Harold is too severe, Uncle, the least little thing he doesn't like makes him lose his temper."

"He has a great deal to do, Laura. You should make allowances."

"I'd make allowances for him if he would make allowances for me."

"Laura, you are altered from the girl I knew, I never thought you would be fickle."

"I like Mr. Forest a great deal better than I like Harold. He tells me things that I can enter into, he's interesting."

"Forest spends half the time he ought to be looking after his section of the country in the city. You don't find Harold doing that."

"Edward has organized his work perfectly. It all goes like a machine."

"Nothing replaces the eye of the chief."

"It all depends on the amount of intelligence the chief brings to his work. Edward can arrange" everything in a very little time."

"It is extraordinary to hear you contrasting Edward's intelligence with Harold's. When no one saw anything in what I said, Harold recognised the importance of it."

"Uncle, Harold never understood one word you said, and never tried to."

Farmer rose, walked up and down, then he stood over her and said:

"Laura, you are the worst girl that ever lived. It's plain to me now he did everything for love of you, and you are as untouched as a porcelain image. This is what fashion turns our women into! All they

think of is to be flattered. A man who can turn a phrase and whisper soft nothings in their ear – "

"Did you ever hear Harold whisper soft nothings," asked Laura.

"No, I'm saying that he doesn't."

"It's quite time he should learn them," said Laura. "He's treated me like a stick, or log. My father trusted Agatha. He let her help him. He knows a woman's nature, but all Harold thinks of is to get his own way, and if you do the least little thing he doesn't like, he treats you like a slave."

"Laura, you are a woman with the core left out. No matter how a man loves you, if he hasn't the manners of a popinjay, he counts for nothing."

"Harold doesn't really care for anybody, all he wants is to be master. He uses you, and the Orbian, and the army, and now there's nobody but great him."

"He didn't use you."

"He didn't care enough about me to use me."



"You are a problem, Laura, the solution of which is mercifully withheld from my comprehension."

"I can understand myself perfectly well, and I can explain things to other people which you never could."

"What about my class at the school, Laura?"

"The very first word you say you puzzle the children, and they never recover all the time you are there. The last idea that comes into your head runs away with you, Do you remember how you began to teach me science? The director asked me as a particular favour to try to induce you not to go there any more and sacrifice the children to your system."

"That means they don't want my way at all. None of them believe in it."

He spoke with deep dejection. Laura was satisfied with the sadness she had plunged him into, and began to make up a little.

"Well, Uncle, I do. It seems a very round-about plan, but after a time one finds oneself thinking quite differently, one seems to feel differently. I'll take your class for you, you are a dear good uncle and

shall have all your plans carried out whatever the wicked director says."

## Chapter 15: An Afternoon Call

"Agatha," said Laura, "here's Mr. Forest come to have a scientific talk with you." Agatha smiled with anticipation, but Forest looked at her with grave preoccupation as he pressed her hand. It had not been with the intention of talking science that he had entered Cartwright's house, but plainly such was the occupation immediately in front of him.

His feelings had recovered from the shock Laura had administered. It must not be supposed that he was of a fickle or variable nature. He had, as was natural to him, expressed frankly the feelings which any lover would have had if the dear object of his devotion had spoken in as intellectual a manner as Laura had on a memorable occasion. He had since then approached Laura wonderingly and cautiously, and, finding that the phenomenon was not repeated, his old admiration re-asserted itself.

"What is it?" asked Agatha. "You look so deep."

"It's so wonderful," he answered.

"Ah," she breathed.

Now, it was easy enough to talk science to Agatha. The vastness of the subject and Agatha's receptive disposition gave him ample choice of interesting topics. Moreover, a besieging force often finds cover for their approaches by the very works erected by the defenders against them, and in this light he critically examined the situation.

After a pause befitting the dignity of the announcement, "Science," he observed, "has made a new conquest."

"What is it?"

"The Phenomena of Society."

"Oh, no, Mr. Forest; those depend on what people want to do. Science is about the laws of Nature."

"Nevertheless, a way of making an exact science of our social existence has been found. Its statistics – just so many elopements, just so many marriages every year – each one is prompted by human motives apparently, but the sum total is invariable, an inexorable law reigns."

"Is that really so?"

"Yes. You may think you are refraining from getting married for a reason of your own, but that's only your fancy; the true reason is that it is necessary for the average to come right. There's one exception though. I took up the science of statistics some time ago, and have made tables of data and have really found out an extremely curious thing. The number of marriages in this city has been the same year after year, month after month; but last March it went up 3,000 over the average. Now, would you not say that there must be some cause for that?"

"Certainly," said Agatha, and Forest was glad to see that Laura was listening too.

"Well, such an unusual circumstance attracted my attention, and I set about to enquire. I did it in the most delicate way. I identified those couples whose ages of marriage in the said month of March were some-what unusual, those who seemed to have left it rather late you know, and sent out agents of the statistical society – decent men, who, in the most tactful way, explained that their interest was purely scientific and put the necessary questions."

"Did they tell?"

"Yes," said Forest. "When convinced that it was purely scientific inquiry they told, and I discovered a really singular thing."

"What was it?"

"I traced it out that all those marriages came from one single cause. About 15 years ago a young man whose name I must withhold – call him Charles – fell in love with a Miss Smith, let us say. They were both very attractive people, and a girl was secretly in love with Charles, while Miss Smith had some openly declared suitors. Now, obstacles came in the way of Charles's and Miss Smith's love. Their course in life separated. Neither of them married. Why? Because neither of them felt able to take the decisive step of getting married while the other was still single. Similarly, the girl that loved Charles in secret would not get married as long as he was single. And the suitors of Miss Smith could not prevail upon themselves to enter the bonds of matrimony as long as she was possibly theirs. And each of these young people 15 years ago, each of them was attractive and lovable, and inspired tender feelings in the members of a second circle, none of whom could find it in them to get married until the girl who loved Charles – or the suitors, one or another, of Miss Smith – married. And so it went on in ever increasing ramifications. There was no reason at all for all these people's not getting married except that someone else was not married. Now this went on for 15

years, till in March of this year the original Miss Smith got married – not to Charles, to someone else. Then Charles married, and there was a rush to the registry offices and the license department, they just fell over one another like nine-pins in a row, getting married. And now, whenever I look at the returns of my province, see the lists of unmarried males and spinster women, I feel a deep sense of pathos. To think of all those fruitless lives just because some original pair lost one another, and couldn't get over it!"

"How wonderful," said Agatha. "It shows how everything is linked together by cause and effect."

"Yes," said Forest, "it shows the advantage of studying everything by statistics."

"I really must write that down in my commonplace book," said Agatha, rising.

"Don't forget the numbers," said Forest. "You'd better put them down at once. Three thousand marriages above the average between March and May." Agatha went to record the information.

"Edward," said Laura, "how can you tell Agatha such things?"

"Oh, I exaggerate a bit, Laura, but it is essentially true. I want to speak to you frankly, since you have heard – do you realise what you are doing? Miss Cartwright and General Wall at one time were attracted to each other, but an irreconcilability of temperament showed itself. Neither married because the other doesn't, and a whole host of unfortunates are prevented from happiness. No doubt the General has his admirers; you have many who will never marry while you are single."

"That isn't true, Edward."

"Professor Flower, for instance – he has been heard to say that to guide your mind would be the most inspiring task a scientist could have, and there are others, not to mention myself. And each of us have our sad consequences, blighted hopes; others stand on the verge; now, for instance, Agatha will never marry till I do."

"That's quite too much, Edward. I never knew you were conceited before. Agatha isn't in love with you."

"No, she is in love with Brand, and Brand has decided to marry her when he has completed her scientific education. Now I am always telling Agatha some of my scientific notions and she tells them to Brand as if they were her own, and so – well, he admires her too



much to show he isn't pleased, but he decides that he has to begin everything over again."

"Edward, how can you? You must leave off that mischief at once."

"And have you the slightest right to dictate my conduct to me? No, Laura, if you married me it would all come right. Just marry me for sociological reasons."

There was a kind of break in his voice which betrayed the intensity hidden behind his fooling, and made it very difficult for Laura to reply.

"Edward, you are very nice and good, but I couldn't marry you. It's simply impossible."

"Try being engaged, then, Laura," he said. "It will accustom you to me, and you will see whether it is impossible after all," and he bent forward and kissed her.

"Oh, no, Edward," she said, "it's impossible. Don't ask me."

He had recognised that he had been too precipitate; but he excused himself, for he really couldn't help it, and leaving, felt not so

dissatisfied after all. He had gained a step in getting her to look at the situation rationally.

## **Chapter 16: An Accidental Meeting**

Wall's task had been by no means an easy one. His chief difficulty was with the management of the farming class. They were aggrieved at the new regulations. They worked, they said, while others were idle – for the exercises by which the planet was to be deflected from its course did not strike them as work – and working, they must be paid.

Now, since ordinary manufactures were in abeyance except to the limited extent which was needed to provide the articles of barest necessity, to pay the farmers would have meant that the circulation of money would be stopped, all would come to the producers of food and none return from them. Consequently, they were deprived of the products of their labour for what they considered an unjust and miserable return. To put down the active and overt rebellions that resulted from the discontent in the agricultural districts demanded incessant journeys on Wall's part. He found some way of quelling the disorder which overtaxed the powers of his lieutenants.

It may be conjectured that he had no time to study the new departure of thought, and the most irksome occasions of his itinerary were those in which he was called on to inspect and encourage the institutions of national education.

One such bad hour he experienced on returning in July, the month of the harvest in Persepolis. The director of the famous school of the capital explained to him how, by means of models showing the appearances of a three-dimensional object, the children were taught to think such objects natural, the great difficulty in the way – the absence of sense perception – being thus removed.

"It is undoubtedly the fact," said the director, "that this new conception of existence has a marked influence on the power and scope of volition. For one thing when the children get to know that real existence has a dimension they cannot see with their bodily eyes, and has a richness of movement they cannot make with their limbs, they realise that they are not these bodies, they realise that they are beings of this higher kind, directing these extended bodies of a lower plane. And this conception of the higher movements, the higher activities, seem to wake up a response in their physical organisation. It is as if there were a multitude of beings in each child that were capable of being waked up to a higher grade of intelligence than has hitherto been the case.

"The comparison you will best appreciate is that of an army, an army whose soldiers simply know their drill is a good, serviceable instrument. But if the private soldiers, beside their drill, learn to exercise their intelligence, a general can do infinitely more with

them. They will throw themselves into the right formations, not be dependent on the processes he has to adopt to convey his will to them. And thus I find that the very bodies of our children are undergoing modification. In the old times to teach the use of a musical instrument it was necessary to drill the hand by incessant repetitions of the necessary movements, now I make the child clearly understand the anatomy of the muscles and nerves requisite for carrying out the effect I want. From the child's mind this knowledge in some way pervades the awakened individuals of the body, and the change of organisation I want, the facility of execution, comes with but little practice. Indeed, I look forward to wonderful results. Hitherto, these subdominant agencies of the body have been concerned with maintaining the vital processes of keeping the status quo.

"But I see no reason why they should not modify, alter, and adapt those vital processes. We know that there is an intelligence in these subdominant agencies which can repair small injuries, restoring the perfect image of the unimpaired condition. By the same intelligence re-inforced and put into communication with the dominant mind, I believe that structural changes, not of the mere nature of conservative repairs can be effected. I believe that a sensitiveness to light can be locally induced, that it will be possible to call into

existence new organs of such a nature that we shall be aware of objects on both sides of us."

Wall had spoken with the educators in the provinces, but had met no one approaching this director.

"Sir," he said stiffly, "I am old fashioned in my views, perhaps, but I think the last place for the application of wild theories is in the schoolroom."

"You have only to see for yourself, to find how unfounded your criticism is," remarked the director and led the way into the school. The sweet sounds of children's voices fell on Harold's ear, and interwoven with the delicate shrill melody a rich soprano. Involuntarily he stood still. For the moment he was again gliding over the Alban Lake in the flower-garlanded boat with Laura opposite him.

They entered the room and the director began to say "Miss Cartwright..." but stopped, for Laura in her confusion had dropped her book, and stood, her gaze fixed, her face alternately pale and flushed.

"Harold!" she gasped – and he who had never shown a sign of discomposure in any peril, stood still utterly confused before the girl.

"Laura," he ejaculated. Their eyes met in one happy glance. The director seeing an introduction was needless, tactfully withdrew.

The children stared and giggled. They had never seen their adorable teacher, who greeted every visitor with such assured affability and who was so ready for every emergency, so confused. They all wondered what was going to happen. Finally Laura said:

"I am glad to see you again." The words were simple, but was there ever such an expression of divine content!

"Little did I imagine I should find you here," he said. Again that ineffable light greeted him, but she simply said:

"Sit down, I am teaching uncle's system."

In quick succession the thousand and one incidents of their lives crowded on him while he watched her, even some faint notion of what she was saying reached his mind. She was saying a number of words he had never heard before, for it was part of Farmer's plan to name everything he thought about, and he hoped to enrich the

Unæan vocabulary with thousands of new vocables. Laura was trying her best to induct the children into their new department of language. Now it was impossible to say these words in their right connection unless with close attention, and she gradually became more herself.

For Laura was in face of the worst problem which afflicted the inhabitants of Unæa. She was in the presence of tyrannous little creatures, who took a malicious pleasure in getting puzzled and failing in their studies if she departed in the least from the utmost exactitude of speech or trusted them to make the slightest natural inference. As to the lesson itself this is not the place to give it, for here we are obliged to stop when we come to what is really interesting. Enough it is to say that, as she gave it, Laura completely recovered her composure. In Unæa, as here, people were in contact with something more important than their own pleasures or pains, however entrancing, however desperate. And Laura was at her post: whatever she felt, she must do her part to drive the great engine along.

"So," said Harold, when the lesson was over, "do you mean to say you really teach the children about the third dimension?"

"Yes, they all learn about it."



"But, can you show it to me? If it is real it must be somewhere."

Laura sank her beautiful head in thought, "I'm not so sure of it myself, Harold."

"It makes me glad to hear you say that, we haven't much time on the march to think about such things, and feel as if we had fallen behind when we hear that even the children understand all about it. I passed through your father's place. He's done a great work with his new varieties of plants. That's what I admire. He didn't lose a moment after he came to a full stop, but turned himself resolutely in another direction without wasting a thought on the past."

"But, Harold, it's natural to look back sometimes."

"Oh, yes, we can't help doing that."

"Uncle is wondering why you don't come to see him."

"I'd like nothing better," said Harold, glad that she intended to 'look back' a little, "and have a quiet talk with my old friend. Many of us think that your father is the strongest man we have got, and that we cannot do better than put him at the head of affairs when I resign. And that may not be so long either. He would find it easier to take

hold when there is still danger enough to make people co-operate. You know I have done a lot of unconstitutional things, and when the newspapers come out again they are sure to hound the people on against me, unless I and my doings are matters of ancient history."

"I don't think you could possibly resign till the time of danger is over," said Laura, "and you ought to think better of the people than you do."

"There's no time like the present," said Wall, glad to find she did not regard him as an usurper of her father's power, "let us go to your uncle's now."

"He will be glad to see you," said Laura simply, "but first you must go and thank our director."

So Harold called in at the office and explained how much he had been influenced by his personal inspection of the system, and then actually walked with Laura, who trod every step of the way as if it were the most ordinary process in the world.

At Farmer's house, although it was the hour in which Unæan society was wont to distribute its presence most liberally, there were but a few persons to be seen. Two Orbian priests, Luke and Percival, who

as a kindly duty tried to render less conspicuous the emptiness of the official residence, and Forest, who would have sought his flaming star anywhere, were the only visitors.

"Where have you come from?" asked Farmer, as he clasped Harold's hand.

"The very last place was the Central Academy," answered Harold.

"And how did the new system strike you?"

"What an extraordinary person you have got as director," answered Wall, evading the question.

"I give you credit," said Farmer, "for a good deal of perspicacity. When I came to introduce the knowledge of the third dimension into the schools I found that the minds of all the teachers had been atrophied by contact with youth. Moreover, they had been so long in the habit of explaining things which no one can understand, that they had lost the feeling of what understanding is. So I cast about and reflected that in the commercial world a class of people had been evolved who gained their living by forming opinion. There, where their talents had been evolved by free competition, I found a class of workers who leave the professional educators far behind in their

power of evoking belief. Now, in the cessation of manufacture there was absolutely no employment at hand for those whose faculties were devoted to the recommendation of one kind of wares rather than another. What was more suitable then than to use the extraordinary powers of persuasion they possess for the benefit of the school children, thus enlisting the force of credulity on the side of truth. The director is a man who, as he often informs me when we quarrel, drew in commercial life ten times the salary I could ever hope to receive."

"Anybody would think," said Laura interrupting, "that uncle was a perfect tyrant, but he isn't, really. How many of these new kinds of professors have you appointed, tell us truly."

"One at present," said Farmer.

"One is enough," observed Wall.

"And how he treats you," exclaimed Laura, "he won't let you go near the school, he says you puzzle everyone you speak to."

"You are prejudiced against him, Laura," observed Farmer, meditatively, "you, almost as much as the professors. They threatened to resign in a body, but when I appointed this director

they withdrew their opposition very nobly. Rather than give their pupils over to men like him, they have consented to continue in their posts. Still, they are mistaken. The new director is producing wonderful results.

"I am the only one to suffer – I want to make people think differently, and the way in which I am sure it can be done best, no one will accept. They say it is too long and tedious. But people will have to think differently. They can't help coming to believe in the third dimension somehow, and then they will think differently about everything."

"That is exactly what I have felt," said one of the priests, "Mr. Farmer thinks differently from the rest of us, he has practised himself in his system so long that things which surprise us appear quite natural to him. I have often wished to ask him what he really did mean by his attack on us during the conference in the Orbian palace."

"That would have better been left unsaid," replied Farmer.

"Not at all, it interested us very deeply, but we did not understand how we could be accused of attaching too much importance to the body when we try to think only of the soul."

"That is exactly your mistake," said Farmer, "it is impossible to think of the soul alone. You cannot conceive a will without processes of nature which it can act on, which produce definite results. If everything happens arbitrarily I can't conceive myself as performing an act of will. Hence the soul implies bodily relations. You must have them, and if you don't acknowledge them rightly they will come in wrongly. It is impossible to conceive a being capable of will and action without a world of things which do not will and feel and by which that being can produce definite results. Some people say that you cannot conceive a world of things without a mind. Colour does not exist unless there is a sentient being, and so on. But this argument does not seem to me conclusive, – besides it leads to idealism, and idealism is the only absolutely fatal kind of philosophy. Whatever other path of inquiry you take, you may sometimes get a new idea, but idealists are so occupied in proving all the time that what is is a form of the ideas they have, that they cannot possibly get a new idea."

"We will give up the idealists," said the priest, "I offer them to you as a sacrifice, tell me your objection to us."

"Everyone," said Farmer, "can be judged in two aspects; one as to the work he does, the other as to how he behaves. We can pardon

defects of manner if a man does his work satisfactorily. Now the soul should be judged in those two aspects also."

"We think it is of the utmost importance that every man should bend his soul to the faithful accomplishment of his duty."

"Yes," replied Farmer, "but it is as his duty manifested in some quality, not quite simply and directly as doing something. The fact is we can't make the analysis into soul and body in your way at all. We have individuals given in nature in two aspects which you call soul and body, but it is impossible to resolve them into any such constituents. If we think of the soul we must think of it as a new individual having both spiritual and material relations. I think it is a very small being guiding and directing your body as your bodily form would guide and direct a machine. Our souls hurl this great vital world along, and do it by means of our bodies. It is not fair, it is disheartening to be too particular about the precise way in which they run their machines. Now I ask you, are we not all better now that there is obviously a real work on which our souls altogether are engaged in diverting the course of our planet?"

"I don't think I'm one bit better," said Laura, "the other day when I was in the Cathedral and all the others were trying to imagine they

were angels soaring upwards, I thought I was a little black demon going down."

"Laura," said Farmer with solicitude, "didn't you feel a horrible grating sensation?"

"No," said Laura, "I felt going down so comfortably and fast that I got frightened and left off."

"I think we do not differ from you essentially," said the priest, "but from our knowledge of human nature we have to take account of much you disregard."

Farmer had been speaking calmly, but inwardly he was growing more and more indignant. He was conscious of differing radically from Luke. All the evil in the world he attributed to the imposition of false ideals. He was on the point of speaking his mind, and letting his friends know what he really thought. But something prevented him. A sense of his own crude and curious simplicity came over him in the presence of Luke and Harold. It was something so strong, so inexplicable and strong, this "religion" of Luke's, something so strong this love of Harold's, so incapable of being laid down bounds to and prescribed its place in the world. Who was he to lay down rules for a world in which such things were? He contented himself



with saying, "Perhaps I do disregard a great deal that there is in human nature, that's very like something you once said to me, Harold, isn't it?"

But Harold did not answer. Ever since Laura's words he had been absorbed in thinking of them. He knew that he, for his part, even such a brute of earth as he, would feel as if he were soaring in the empyrean heavens if she were his and he hers. And she now, if she loved Forest, would she have spoken so? To think she was a little black demon going down wasn't the part of a girl in love.

Farmer did not press for an answer, but went on addressing Luke.

"I come from the contemplation of inanimate things, and what I would say about human nature does not count for much. But it seems to me that you are presumptuous in claiming to direct the human spirit when you do not rise to the intellectual level of the age. The man who really means to do anything seizes the tools for his work – and the tool of thought is space – only as we think of things as in space do we get hold of them with our minds. The ideals you would inflict on us spring haphazard, and you choose them more often because they satisfy your fastidious taste than because they are the real ends of human endeavour. You dwell in the past when the sword

is ready for you to grasp and use to cleave your way to a knowledge of what the soul really is, what its work is."

"What is this sword so mysteriously coming to us out of the air?" asked Luke.

"It is three dimensional space," said Farmer.

"You are a true enthusiast," said Luke, "but I fail to perceive any connection between an extension of geometry and the spiritual nature of man. You are dealing with altogether disconnected subjects. The feelings implanted in us by the Divine author of the world are altogether independent of space and time. His will is revealed within the heart, to those who accept the message He has sent the world. I can understand your wild reckless seeking after certainty, it comes on all those who have left the path of faith, and, believe me, we frame no ideals, make no wanton demands on human nature, we but speak God's will as He speaks through the infallible head of His church."

Laura had been listening attentively to their conversation, and now broke in.

"Mr. Luke, I think you are not at all nice to uncle, he is just as good as any one can be."

"Tell me, Laura," he answered, smiling, "what ought I to do?"

"You know he can't come over to you, so you ought to go over to him and find out what he means."

"I should only be too happy if he does not think me too ignorant," said Luke.

"What I mean is very simple," said Farmer, "we find out about the people we know by means of their bodies, in this material world we have found parents and children, country, lovers, friends. You say that there is more than these. Granted. But why should we abandon the way in which we have found out all we know? Space is much larger than we think. If we become familiar with it as it really is we shall find those higher objects of our regard about which you tell us, and we shall find them as they really are, not as we fancy them. We must train ourselves to understand the higher space things, and by so doing we enter a wonderful world with all kinds of new possibilities. The simplest thing in three dimensional space, cannot be shown in our space except by means of inconsistent two dimensional things. If you want to learn the higher space things, you have to study things

in our space which are inconsistent, incredible, illogical, but you must train yourself to them, and you will find out that these illogical appearances are really consistent in the higher reality – thus you will learn the only sure way of finding the objects of religion."

"But," said Luke, "am I not right, Mr. Farmer, in supposing that there is no end to space, no finality in it, and one space being comes after another for ever?"

"Yes, certainly," said Farmer.

"Then in that way I could never find anything ultimate, I could never know God."

"Certainly not," said Farmer, "you can only know the proximate and so on endlessly."

"But have you ever thought," asked Luke, "what this whole space system springs from, have you never wearied of it, tried to go outside it? That is what religion does. And just as the higher space thing is only known by inconsistent appearances in a lower space, inconsistent, incredible, and, as you say, illogical, so that which is the object of religion can never be known in any space system at all save as incredible. But our faculties are not limited to space

perceptions. By the impossible and, if you will, illogical statements of religion, we can wake the soul up to something above the space view altogether. Since religion is something above space, if we express it in the space way it must be a mystery."

Farmer did not answer. With all his mental activity he was a creature of the most extraordinary limitations, and now he was in the presence of a thought entirely new to him.

He made no answer. Forest relieved the silence by saying:

"Laura, I am glad to know that you will spend the summer in my district." This plan of her father's, which she heard of for the first time thus unexpectedly, took Laura by surprise.

"I'm tired of that part of the country," she said, "I know it so well."

It was, of course, perfectly ridiculous to talk of being tired of the most beautiful scenery in the whole of Astria, and Forest, afraid she would make some even more pronounced objection, or possibly refuse to go at all, made haste to say:

"I think I could tell you something you don't know even about the Alban Lake. Just reflect how singular it is to find a body of water

like that almost over-hanging the plain. It isn't a natural lake, it was originally a small depression in the ground, but the farmers have built a dam for the purposes of irrigation and so as to raise their crops in the valley below."

"Which they are not very anxious to share with anyone else," said Wall.

"On the contrary, I find them a reasonable kind of people when matters are properly explained."

"They are a different set then to those I have found in other parts of the country, all the difficulties originate with the farmers."

"I hope you will be persuaded to come with us, General," said Forest, arriving by rapid intuition at the cause of Laura's disapproval of the project, and disdaining to take any share of complicity in the net Cartwright was weaving round his daughter. A grateful look rewarded him – he felt sure she would come now.

"Thank you," said Wall, somewhat stiffly, "I'll come if possible."

Returning to his house he said to Beam:

"If a successful rival were to ask you to walk behind his triumphal car, what would you do, Beam?"

"I should say – "

"I didn't ask you what you'd say, what would you do?"

"I'd be a death's head at the feast."

"I'd try to be something not so bad as that. I tell you, Beam, there's a girl in this city that the flowers spring up wherever she steps – if I could see her once a day, nothing the farmers could do would bother me. Where are your last reports?"

## **Chapter 17: The Journey**

No one could have told from Cartwright's manner as he chatted with his travelling companions that he was confidently looking forward to the time when one of them should be decapitated and the other imprisoned for life.

But this was the fate he had settled on for Wall and Farmer, and he manifested an eager solicitude for their welfare, occasioned by the natural regret he felt at the prospect of soon parting with them. Gamesters playing for high stakes can take an interlude, and the three men, despite their differences, had much to say to one another and, notwithstanding the oppressive heat, no moment was irksome. They started late one afternoon, and proceeded by easy stages; on the second day they began the descent of the nearer hills overlooking the plain they had to traverse before reaching the mountainous region which was their destination.

Descending the hills they came upon a level expanse, rocky, with but little depth of soil, but famed for its extraordinary fertility owing to the supply of water from the Alban Lake on the opposite hill-side.

Travelling along this level, none of them could help noticing the extremely scanty nature of the crops now nearly ripe for reaping, and



Cartwright made a laughing allusion to the advantage of his kind of cereals.

Forest did not respond – he felt mortified at the poor showing of his farmers after the confidence he had expressed in them.

"It's about here," said Cartwright, "that one of the refuges I planned was dug."

"Papa," cried Laura, who was a little distance ahead, "why is it – it sounds as if the ground were metal?"

"You are on a piece of metal," said he, "a metal rod that covers the entrance to a refuge."

"Papa, I have always wanted to see one of these places," said she, "can we lift up the lid and look in?"

"What is the use," said Cartwright, "my brother says they are of no use."

"Not at all, friend," said Farmer, "everything has its use; they may have a use some day. By a blind instinct the bird makes its nest, and then turns it to a most unexpected use."

"I agree with you," said Cartwright, "the unexpected often happens – let's pass on, Laura, we won't look in." This he said considerately, feeling that Farmer might have the idea of a prison suggested to him by the sight of the dismal opening, but Laura appealed to Forest.

"Your men are so strong," she said, "they could easily lift up the end."

Her word was a command, the party halted, the end of the rod was found beneath the grass which had crept over it, and a few efforts prized it up. Then one by one they advanced and looked in.

"Why there's no end to it," said Laura, listening and hearing no reverberation from a stone she had dropped in.

"From that shaft the caves stretch out backward and forward," said Forest, "they are, I am informed, quite dry and commodious."

"Oh, Uncle," said Laura, "if it hadn't been for you, we should all have had to go down into those dreadful places! "

"They may turn out very useful yet," said Farmer, " we are by no means out of danger. The earth's bulk is very vast to be moved by the delicate instrumentality of men's thoughts." This he said in his desire

not to let Cartwright feel too severely the mortification of having provided such useless caves.

"Shut the horrid place up, I hope we shall never open it again, never," said Laura.

"You may be very glad to," persisted her uncle.

It was a relief to the whole party when the covering of the aperture fell to again. In the bright world, the sun shining, the breeze wafting its incense, and all the pageant of nature's sumptuous robe spread before them, with the thoughts of ages incorporate in their mind, their hearts attuned to love and pity, hope and fortitude, – how could it come about that an accidental proximity of some distant inert mass could threaten the necessity of a descent into that chasm, the forced seclusion of that dismal and uncertain refuge!

Their resting place for the night was close at hand, and here Forest had appointed a meeting with the inspector whose duty it was to report on the quantity of grain which the district would furnish for the year.

The inspector made his appearance accompanied by several farmers, who wore an expression of dogged obstinacy. It appeared that there

was but little grain in the whole district beyond the small supply necessary for the wants of the inhabitants.

"Sir," said the inspector, "these men have made all sorts of excuses, but every circumstance has been favourable to a good harvest."

Forest examined the unwilling witnesses and soon evoked the sullen admission that they had not planted their fields – they saw no reason why they should work for nothing, and had only sowed for their own needs.

Angry and over-hasty in his annoyance Forest declared that he would take all the grain they had.

"What shall we live on?" they asked.

"You can live on roots and berries, next year you will know better," and so saying he dismissed the sullen crew.

"Come, Forest," said Wall, "don't spoil our journey for such a trifle, I told you they were up to all manner of tricks, take this one good-humouredly and let us enjoy the advantage of your popularity."

"I'll think the matter over," said Forest, "there is time enough to-morrow."

On the next day, however, when the preparations had been made for an early march, Wall remarked, "I don't like this, Forest. Look ahead as far as you can see, not a living thing in sight."

It was true – far as the eye could reach no smoke rose, no figure was seen.

And as they looked, from the opposite hill-side in the distance a silver glint caught their eyes.

"That's water," said Forest, "the lake is over-flowing."

"It's worse than that," said Wall, as the whiteness spread.

"I believe those villains have blown up the dam," said Forest, his eyes fixed on the distance.

And so it proved. Microscopic in the distance, but advancing with incredible velocity was a wave – a consuming devouring wave, sweeping away before it all that it met. While they stood and gazed it ate up the distance. No speed could bring them to the refuge of the hills behind them. Sudden death stared them in the face.

Realising the peril, the hopelessness of it, Forest turned to Laura.

"I have brought you to this," he said, "you, I would have died a thousand deaths for."

"Miss Cartwright has to die sometime," observed Wall, "meanwhile let us get as near to the hills as we can."

At the crossing of the subterranean chamber he stopped.

"We could find a refuge in here," he said, "if we could be sure of ever getting out."

"Let us send the water in," said Laura.

They crossed over and then Wall set a couple of soldiers of the escort to work. In a few moments the rod which formed the covering of the aperture was dislodged and flung into the abyss.

Laura had stopped, looking at the men at work. Wall bade her hurry on.

"I want to see," she replied, and remained standing just behind him.

The great wave came toppling on, foam streaked high above their heads – leaped at them, but sank in the wide yawning chasm. Merely the crest leaped over and threw them all in a confused mass.

In that moment of imminent death, so quickly threatened, so speedily averted, a delicious sense of nearness came over both Laura and Harold. If only the elements had precipitated them into one another's arms no misunderstanding could have parted them. But waves are blind. The forces of nature must roll on, and Farmer's philosophical disquisitions are not ended. Hence the malignity of the elements threw these poor plane beings into a confused heap, and Laura catching hold of the first person she came across seized Forest's arm. When the yellow water was sucked back into the chasm in which the flood from beyond kept pouring with a roar, Wall saw her being tenderly revived by another. The sight was too much for him, and he hastened back to the city.

## Chapter 18: The Editor

Cartwright had turned his efforts to the moulding of public opinion, deeming that course the surest way of restoring a rational form of government, and returning himself to power. The time was approaching when astronomical observations relating to the Astrian orbit were to be given to the public. In view of that occasion he, in company with Lake, held an intimate conversation with the editor of the most widely read daily paper in Persepolis.

"There is," said Cartwright, "a certain amount of intelligence diffused through every community."

"Yes," said the editor, "it is to that, that we appeal."

"Exercises of religion," said Lake, "disproportioned to the piety of those that perform them, are exceedingly irksome."

"My staff is of one accord on that point," said the editor.

"Moreover," observed Cartwright, "a disturbance of all avocations, a subversal of all trade and business, can only be endured when the results are immediate and striking."



The three men were silent for awhile, at last the editor observed:

"The time does seem ripe for action, but there is always the danger of another suspension of our publications."

"Yes," said Cartwright, "it will be necessary to begin cautiously, but the people will not stand the suspension of the newspapers again. Such acts of violence could only be arbitrary and occasional. If all the Press is agreed, it can say what it likes, and, moreover, I have provided a fund which will ensure individual proprietors against loss."

"I see a grand day dawning for journalism," said the editor with animation.

"Yes," said Cartwright, "the peculiar faculties of the journalist can now be used for the advantage of his country."

"You should," remarked Lake, "at once set your writers to work, to get up the subject of Farmer's theories."

"You underrate their talent," said the editor, "they know enough to make any subject ridiculous at a moment's notice, laboured productions have no effect on the public mind."

"Lake," said Cartwright, "you have a mistaken idea about literature. When people read, they merely get their own ideas put into different combinations or illustrated neatly. Now Farmer's idea, besides being false, is a new idea, it has no show in print at all, we shall have it all our own way. The whole imposture will dissolve in ridicule."

"When shall we begin?" asked the editor, rubbing his hands.

"The exact computations of our position will be finished in a month," answered Cartwright. "Till that time innuendos and veiled sarcasm. After that time kick out, the whole fraud will be unmasked and the army will stand clear of the adventurer; for the sake of its own decent reputation it will not be able to support him, the nature of his crimes will stand out in a light clear as day."

Thus all was prepared. But the shaft of the ridicule suddenly broke!

Observations of the utmost precision taken daily for the space of two years, were submitted to the closest scrutiny and worked at with the utmost care by skilful calculators. And as a result it came out that the planet's course had diverged by a sensible fraction of a degree. Shown, made manifest, marked clearly as by a finger pointing to it, revealed by their changed direction in space, there came to all a consciousness of their collective will. It was as the awakening of a

soul to its embodiment in a corporeal frame, the thrilling joy, the wonderful, the inexplicable power of movement – this had come to Unæa. The inhabitants of Astria knew that in their co-operation together, a being transcending them had begun its autonomous course.

The ranks of sound understanding crumbled, the platform of educated opinion was swept away.

"Et Pur se muove," ["And yet it moves"] the great words which mark the beginning of the apprehension of life, whether intellectual or physical, had sounded, and this planet, and all on it together, swung into their new course.

Cartwright's journalistic campaign, so elaborately prepared, was defeated before it began. It was true that the motions and movements with which the astronomers dealt were so small that some expert critics held that the whole result was doubtful, and could be accounted for by errors of observation. But such carping voices gained no hearing, for two reasons.

In the first place, the winter instead of coming in with a violent wave of cold, began mildly and pleasantly, and in the second place a change in the thought of the people took place.

This most real and living space we know can be looked on as an instance of the laws of combination and permutation, and its properties can be deduced from an algebra, or it can be looked on and loved for its own sake. The mind can grasp it more and more fully in its direct complexity, knowing it at first hand as real even if removed from sense by its amplitude in unknown directions.

But who can say which is best? The magic of algebra or the love of space?

In Astria, at any rate, it happened that all the wielders of the combinations of one and two and three, and all the designers of all the possible configurations that could happen from abstract principles in this higher space, failed to detect any hang-hold of Farmer's theory on actual fact.

But amongst those who learned by means of models, making visible and tangible the aspects and views of the higher reality, were some who sprang, with a kind of inner awakening, to the knowledge of the third dimension.

And these, feeling rather than reasoning about that higher space, realised in their inner minds what these poor dwellers in a land of two dimensions could never see or touch – the actual nature of three

dimensional things moving and acting – things they could only apprehend in their plane of imagery as things succeeding things. And with this knowledge of inner sense, they brought to the examination of the minute and concealed processes which went on in nature a pattern and example which unlocked their secrets.

They found that many curious and inexplicable results, sphinx-like riddles of science, were the simplest and most to be expected consequences of the motions they inwardly realised. We see very plainly that when the particles considered are small enough, even in Astria, the movements must be three dimensional, for the things are real, and if small in a third dimension, are not vanishingly small. Thus the intimate knowledge of the third dimension was the key which unlocked the mystery of the minute. And so, guided marvellously amongst what some would consider gigantic delusions, vast mistakes, the good ship of Thought glided safe to port.

Farmer followed the work of the younger generation with interest, but also with a deepening sense of his own impotence. To himself he seemed as a man denied the blessed spark of reason, for all the things he might have discovered in his long years of search were found by others, children to him in point of years. He left the busy city and the crowds of men and, half mortified, half amused but wholly glad for now the danger to the dear world was over, he

devoted himself to his garden in far away Scythia. That rebellious and antagonistic mind forgot its struggles and vicissitudes in watching the little beads of verdure that sprang out of the dark earth.

## **Chapter 19: On Lone Mountain Again**

"There is more colour in your face, Laura, you are a different girl from what you were a week ago." From the slope of Lone Mountain a magnificent stretch lay open, and the keen wind of autumn blew with never a touch of faltering or weariness.

"Uncle, you are kinder to me than anyone else," said Laura.

"Dear," said the old man, "I have cause to be. You came and flung your sympathy about me in my lone and struggling solitude – dear, I cannot tell you how it enveloped me and made me whole."

"And was I of some use? You are so dear and good, and I am at peace here. At home they mean to be very kind, but there is a sort of oppression – here I'm like one of your flowers you open the little lids of. It is so restful and peaceful here."

When Laura came to break his solitude this second time, Farmer had received her with a very different welcome to that he gave her the first time, and if he wondered what made her seek him, her paleness gave him excuse enough for believing that it was what she said – the country air and the quiet, so he talked to her, waiting to let her speak to him if she would.

"Yes," he said, "I left all my struggles for this peace. I felt mortified when I found the merest beginners knew more than I did, in what I ought to have shown the way, and could tell me more than I had ever dreamed. Working together is a wonderful thing, one helping another they soon pass a solitary man. A great repose has come over me, and I see the world go speeding its way into wonders of thought I cannot follow. And when I see my flowers so sweetly blooming, the old antagonism leaves me. You remember how I used to talk?"

"Yes, Uncle."

"And Harold told me I judged from without, that if I had other people's problems I should do exactly as they did, you remember?"

"Yes," said Laura.

"And yet there was something in what I felt. It is possible, isn't it, to feel the defects in what other people say without having anything to put in its place?"

"Oh yes, but you did put something else."

"No, Laura, only the way to find out something else. I was angry with them because of the way they thought. But really they were



trying to do something else than thinking. Let me tell you, there is a cave near here, deep down in the ground – you needn't look for it, for you would never find it – but it is a deep cave, and when I go down into it in the quiet dark, then when my eyes are accustomed to the dark I see a new way out, an entrance into a different scene. I will tell you about it. We all think of things, ourselves, every object and being as existing by itself, and relations going out to other things or people like ropes connecting them. Being, as we think of it, is being in self. But when I look out from my cave, I see a different world, the world of being for other. And that is the real world, Laura! There is no such thing as a self being, all being is being in and for others. When we love, Laura, it is not so much that we do anything, but we find being itself – love is not something which may come or not, it is the taste of existence. How can people show this by thinking? They should not think at all, for the only way they know of thinking is to make up ideas of self being, self things."

"But, Uncle, it would be very difficult to say anything, if we couldn't talk about things themselves."

"What is the need of saying anything? That is why I like that unprincipled lover of yours. Harold doesn't say anything, he does things."

"He isn't unprincipled, Uncle."

"Laura, you know very well that not understanding what I said, not knowing the truth of it, the most he could consistently have done would have been to try and get me a hearing in an ordinary way. And what did he do? The ancients compared love to a madness – some it affects in their outward actions, some it seizes centrally so that there is no outward sign of disturbance. Harold was seized that way, he went about his course without the slightest sign of compunction. How else can you explain it?"

"I can't explain anything about Harold," said Laura, "he always does exactly the contrary to what I expect him to."

"It was because you, Laura, seized him so vitally and centrally, that you stood to him for all that is good – you, child, showed him the world's real need. Was there a single moment after you appealed to him, in which he did not go about in the quickest and most effective manner to accomplish what you told him to do?"

"Was I that to him?"

"Laura, it is not you alone or he alone. You do not know, the world over, what power lies in frail and ignorant hands. Sometimes it

seems to me that the little beings that guide and rule our bodily frames must have presentiments and an outlook we know not of, and that a voice out of the secret of things called him by his love for you to labour for the saving of the world. What, Laura, what are you to Forest, the one he would rather win, but only the most desirable one out of so many. Blythe and gay he can talk to you, interest you, amuse you, his nimble mind can keep pace with yours. But is that everything? Look deeper. Imagine you and Harold standing together on a lone hill top with air and sky all around you, where there is nothing but nature and you two. Imagine what he could say to you, how he says, 'Laura, there is something deeper and more solid than all this earth, something that binds us together if all should crumble and pass away, that very being that makes all, that moves all, brings me to you' – surely he would wake a response in your heart."

Laura recalled the moment when she was standing with Harold watching the approaching wave, and for a moment that bliss in the face of nothingness again came over her.

"Uncle," she said, "I wonder you were never married."

"Let me write to him, child," he answered, "tell him you are here?"

"Oh, no," she cried, "no, if you do that I shall go away at once."

"I only asked that question to prepare you, Laura," said the old man sadly. "Harold wrote to me directly he knew you were here, and said he was coming. He will be here in an hour. But I can't see him. Since you have turned away from him I can't bear to see him. Tell him I am ill – I feel ill. Make excuses for me; I don't expect he will want to see me." And so saying, the old man crept back into the house, leaving Laura sitting smiling on the grass.

## Chapter 20: Apology

The reader, no doubt, has been chafing under the unnecessary copiousness of personal detail with which the preceding pages are encumbered. It is the fault of the historian. It is his duty to pass in review a multitude of particular occurrences and incidents. It is right for him to become interested in them, but he should not let his interest run away with him and inflict them on the public.

For what the reader wants to know is the effect of their discovery on the thoughts and opinions of the Unæans – the total change it made. This can best be exhibited by a mythology which sprang up amongst them. The Unæans, like other peoples, made mythologies which, although of no scientific value, yet are invaluable for showing the trend of thought and opinion of a race. For in a mythology those principles and modes of procedure which are used and employed legitimately with regard to the proximate, are projected, and the whole, the total history of the Universe is supposed to proceed after the same pattern. In the mythology which sprang up amongst the Unæans after the discovery of the third dimension, that practically most important fact in the experience of any being – the distinction between the large and the small – held a primary position. The distinction between the large and the small was taken as something

basic and fundamental, and formed as it were the beginning and starting point of their imaginings.

This is the mythology:

In the beginning, said the Unæans, were beings three dimensional, yes, even more, with full plentitude of dimensions and every power, faculty, quality, living a blessed life, with all that heart or mind could desire.

But they were small. Small in a vast Universe. As a little family living on a hillside have love and song and joy, all happiness, and contentment, yet to keep and preserve their happiness and joy, they must turn and labour to conquer the floods, the inclemencies of the seasons, the dangers of nature, so these glorious beings, because they were small in a vast Universe, had to meet danger and difficulty. The efforts of each by himself were minute and inefficacious, therefore they combined together, united their efforts, made organisms which in the perfection of their action and the precision and perfection with which they carried out their functions became not mere compound bodies, but new individuals. Each of these individuals by the mere fact of its existence, each, simply by being put on the scene, meant the safe-guarding, the protection, the insurance of the happy noble life of its constituents and makers. And each in turn, in virtue of its

completeness and perfectness, entered as an individual on a life of new experience, new meaning, new danger. For round these new beings, new individuals, stretched the vast Universe. The day of danger was not over, it loomed different. The task of organization was not over, it had but assumed different proportions, demanded different means. Then from the life within, from the happy life within, full of all powers, all activities, there came the thought, the design, the ingenious perception, the recognition of principles which gave the new individual the capacity for meeting these new, strange, greater dangers.

And thus cycle after cycle, effort and achievement went on. Ever the organisms, perfect, happy, leading a blessed life, which were the completion of one stage of effort, were themselves small, insignificant, exposed to danger in a vast Universe.

And, said the Unæans, our bodies are one stage in this ever expanding act of protection. The process of evolution is a one way process, it lasts for ever, it is the conquest of the large by the small. Within the body are processes surpassing those that the skill of man can devise. Within is an intelligence of corresponding degree, and corresponding to the perfection of function an inner happiness which the body exists to protect. But men themselves are small and in the vast Universe must combine together for protection, must make

bodies in whose power of co-ordinated action, the power of co-ordinated action of a single individual is repeated. In the duty and valour and faithfulness of the individual lies the coherence of the Nation, it but exists as a mere organism in virtue of a higher order of action on the part of the individuals composing it. And thus it is in virtue of powers, emotions, characteristics far higher than those he is conscious of in his individual existence, that an individual comes to be. As he makes, so is he made.

So much for their mythology. What led the Unæans to it? It was this. Suddenly they found that the question to be asked about the motions, the kinds of action that occurred in nature was, not, "How are they produced from rest?"

But:

"How can three dimensional processes and motions be so modified and limited as to produce these motions we observe?"

Thus behind the simple of their experience they found the more complex. Again, when they let all objects and forms fall from their minds, they thought of mere Room, just Room for all to be. And this Room, this possibility of determination, was a two dimensional Room. Now they found that this two dimensional mere emptiness



did not exist, it had to be accounted for by real things, it was only possible on the basis of a reality. That they lived in a plane world meant a surface against which they moved; and this meant the existence of a whole range of physical phenomena unknown to them. Here again was complexity behind.

Hence the whole notion of an homogeneous extended matter out of which things were differentiated disappeared – the question came to be, "How is it that in this infinitely more complex more real three dimensional world we get our impression of simplicity and uniformity – our two dimensional simplicity?"

They saw that because it was easy (and indeed the proper way) in thinking of things to suppose them built up out of the simple, they had come to suppose this simple extension, this simple rest to exist outside themselves. They had projected their means of thought and supposed the Universe made up out of it.

Then turning their thoughts to themselves they became willing to admit that behind their consciously realised selves there was something more complex. And again, confirmatory of this view, trying it, they found that they could think of three dimensional things. They found, when they gave it a fair trial, that the thought of things and movements in three dimensional space was more natural

than their old thoughts of two dimensional things. They found a function of thought in themselves which for ever and completely displaced their old notion of trying to account for themselves and their mental powers by their relation to their environment, the environment, that is, in which their bodies moved. They saw that previously they had mis-read the meaning of their existence. They were not produced in some mysterious way by the interaction of the organism and its environment, but they were the active makers. Their business was to tap the powers of the life within so that they could meet the problems of the Universe spreading vast around them. From within, from the wonderful intellectual and sense life within, they drew the faculties of comprehension, from it they drew the principles by which their science was equal to the problems of the larger world around them, and from within also they drew the principles of union, sympathies, personal activities which made their social life grow deeper, stronger.

Thinking of themselves there were two ways in which the Unæans could set to work. Let us illustrate these two ways. In our world thinking of water, the substance water, we may say it is made up of fluidity, extension, heaviness and some viscosity. Or we can say it is made up of two other substances, Oxygen and Hydrogen. In the one case we are dealing with adjectives which have no actual occurrence,

while in the other case we find constituents of actual occurrence, neither of them in the least of the nature of abstractions.

Thinking of themselves the Unæans could postulate consciousness, volition, and a host of other adjectives. Or they could ask, what is that real which constitutes myself? Adopting the latter way they were led to the following conclusion. Thinking of their bodies it became clear to them that those extended (as we should say film-like extended) masses must be in a certain sense secondary and derived. Real actions and real things were three dimensional. Hence that which was really active and efficient in them must be three dimensional. Now it was only in the minute, in the activities below the scale of their sense of perception that there was any three dimensional activity. Hence, they did not like it, but they were forced to it; they came to think of that which was really themselves as a small being in a two dimensionally extended organism.

Such was the train of thought which led to the Unæan mythology.

The real reason why it took the Unæans so long to admit the existence of the third dimension, was because the admission involved so great a change in all their habitual modes of thinking.

To pass to a different subject. It is impossible to separate the emotional, personal existence of a being from the actual relations in which he is placed. His feelings and the other beings he is in contact with, his character on the one hand and the total of the possibilities of his modes of action on the other hand cannot be separated and analysed apart.

Hence it is certain that the outlook on a different order of physical activity, the discovery that the Universe is so much wider than they thought, must have an effect on the character, emotions and feelings of the Unæans.

And again, to refer to still another subject, Luke's suggestion that there is another mode of thinking than space thinking, a mode of thinking which does not leave space conceptions for metaphysical abstractions, but uses space conceptions to show forth something still more fundamental, this suggestion, leaving as it does on the one hand such freedom for the unfettered application of space thought, and on the other hand opening a horizon beyond, deserves further notice.

But, unfortunately, the preceding pages bring Unæan history down to the present day, and there are no materials by which the record can be extended.